ANNUAL PLANNING INFORMATION REPORT FISCAL YEAR 1980

FITCHBURG-LEOMINSTER SMSA

LABOR AREA RESEARCH PUBLICATION

Job Market Research Service • Massachusetts Division of Employment Security

ANNUAL PLANNING INFORMATION REPORT

FISCAL YEAR 1980

FITCHBURG-LEOMINSTER, MASSACHUSETTS
STANDARD METROPOLITAN STATISTICAL AREA

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PREFACE

The Annual Planning Information Report (APIR) is an analytical and statistical report which summarizes manpower developments and problems in specific labor areas. The report covers developments for the Fitchburg-Leominster Standard Metropolitan Statistical Areas as a whole, and for specific sections within the LMA, where manpower and unemployment problems are concentrated, such as the inner city.

The APIR is intended for use both in employment security and manpower operations and for public distribution to manpower and community planners, educators, antipoverty organizations, local and state officials, business, labor, and community leaders, and others who need accurate and timely area manpower and job market information for decision making purposes. Within the employment security system, data and analyses contained in the Annual Planning Information Report are needed to carry out local, state, regional, and national office responsibilities under existing human resources, manpower development, and manpower utilization programs and to implement Federal programs to alleviate local unemployment.

I. Highlights and Conclusions

The year 1978 was good for the Fitchburg-Leominster SMSA. The rate of unemployment averaged 5.8 percent with 44,600 people employed and less than 3,000 people unemployed. This was much better than 1977 when the average rate of unemployment was 8.2 percent and almost 4,000 people were unemployed. In light of recent trends, both national and regional, it could be said that we are the closest to the level of full employment than we have been in years. Local productivity is booming. Almost every employer who was interviewed for this report claimed that business orders have never been so good and that production was at its peak. Although not many new businesses have opened in the area many companies are either enlarging their present plants or have plans to do so. It would appear that things have never been better and that would be true except for one fact - inflation.

One of the reasons we are experiencing a boom in production is that workers do not mind putting in 12 hour shifts a day, or working six, even seven days a week. They need the extra money to overcome inflation. Also there has been much talk lately about an impending recession. This has caused a lot of panic buying (buy it now, tomorrow it will be more expensive), creating an artificial boom, which makes a recession only deeper. Business moves in a cycle, which goes up and then comes down.

For the year 1980 most economists are forecasting a recessionary trend. Some even say we are already in one. Whether we are already in one now or not, I believe we will feel the pains of a recession soon, especially in view of the present oil crisis. The rates of unemployment will not be as high as they were in 1975, but, due to inflation, people will stop buying. This means demand will decrease, production will decrease and people will be unemployed. The Government in its effort to control inflation, will, as it has been doing, raise interest rates in order to slow down all circulation of money (inflation). This will cause home mortgage rates to exceed 10 percent on the average. Retail food prices will continue to rise, mostly due to the cost of transportation.

The cost of oil is rising daily. This area depends heavily on plastics, a byproduct of oil, for employment. How badly this industry gets hit depends on how long the recession lasts. Raw materials have been stockpiled, but once they run out, it's anybody's guess.

The year 1980 will be the year of I-190. Its completion is scheduled for some time during the year, and its results will be interesting, especially around Christmas time. Its impact is expected to be lucrative enough to justify another shopping mall of an estimated 80 stores. This could hurt the downtown areas of Fitchburg and especially Clinton.

II. Description of Area

A. Definition of Area

Located in Northcentral Massachusetts the Fitchburg-Leominster SMSA consists of the central cities of Fitchburg and Leominster and the towns of Lunenburg, Westminster, Shirley and Townsend. The two cities cover an area of over 215 square miles. The land is hilly and will vary from 400 to 1,000 feet above sea level. Many lakes and ponds cover the area as well as the flow of the Nashua and Squannacock Rivers, which were a source of energy in the past. The major routes of transportation east and west are routes 22A and 19; north and south are routes 12, 13, 31, and 190. Interstate 190 is projected to run from route 2 to Worcester. The area is served by two daily newspapers, two hospitals and two colleges. There are over 300 manufacturers in the Fitchburg SMSA with major production in the areas of paper, plastics, electronic modules, tools, textiles, machinery, castings, turbines, shoes, steel fabrication and locks.

B. Population and Labor Force Characteristics

According to the 1970 Census, the population of the SMSA grew at a slower pace than that of both the state and the nation during the sixties. The population of Fitchburg in 1970 was relatively stable with growth at plus 0.7 percent while Leominster grew at 17.9 percent.

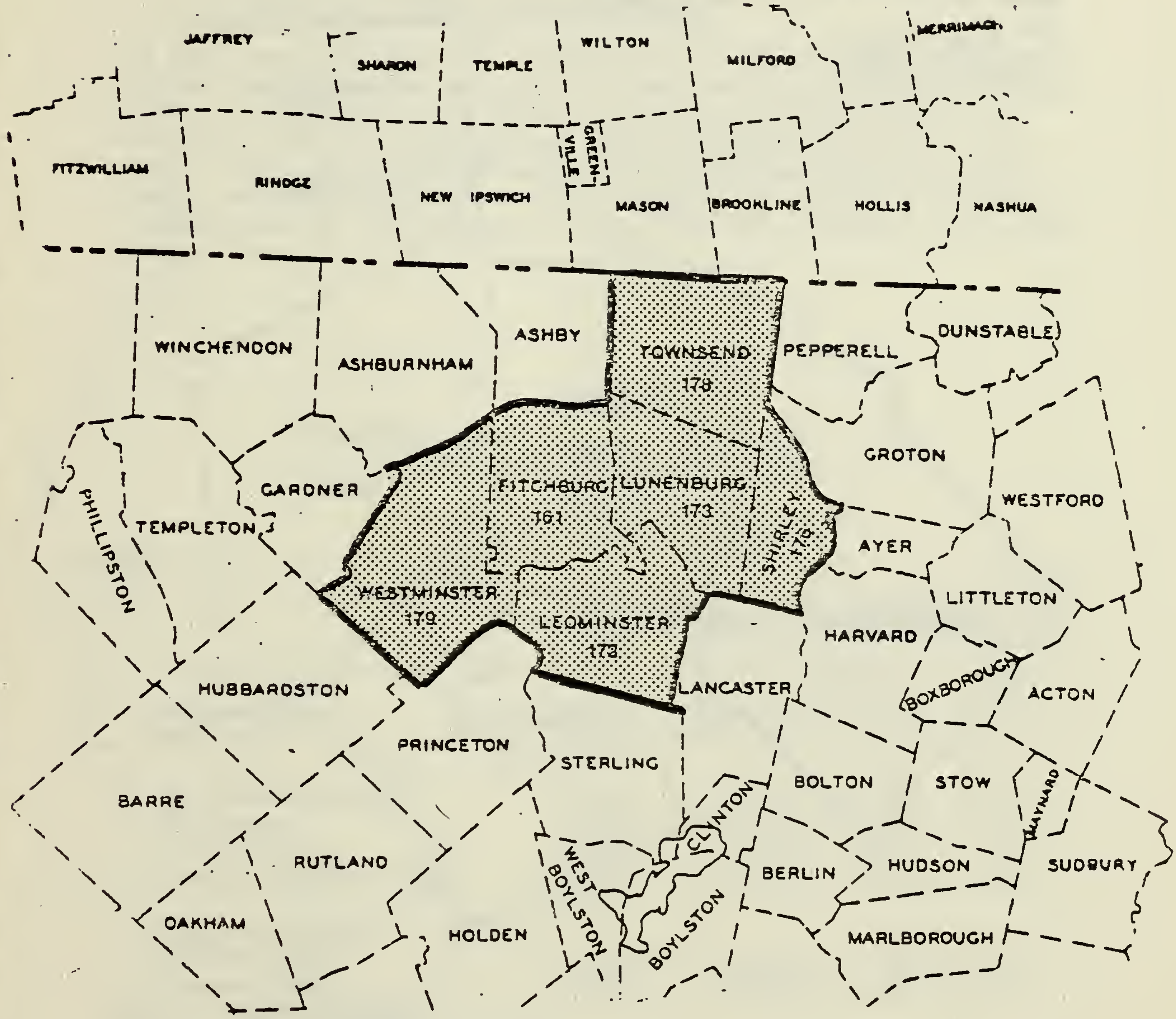
Population of Fitchburg-Leominster SMSA

Table 1

	1976	1970	Change	Percent
Fitchburg-Leominster SMSA	97,224	97,164	60	0.1
Fitchburg	38,501	43,343	-4,842	-11.2
Leominster	35,751	32,939	2,812	8.5
Shirley	4,693	4,909	- 216	- 4.4
Townsend	5,345	4,281	1,064	24.9
Westminster	4,688	4,273	415	9.7
Lunenburg	8,246	7,419	827	11.1

Source: U. S. Dept. of Commerce, Bureau of the Census

FITCHBURG-LEOMINSTER SMSA

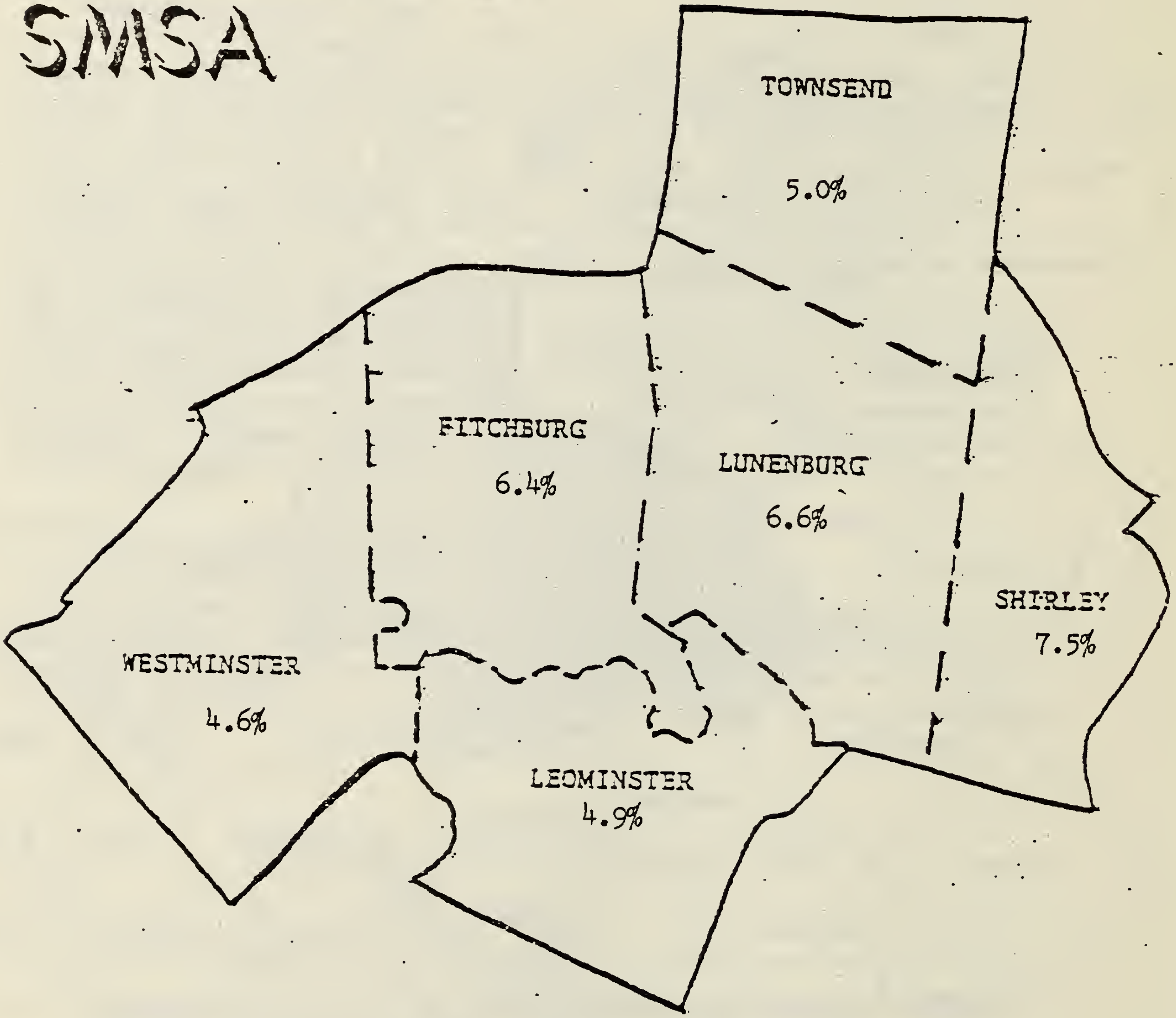


THE COMMONWEALTH OF MASSACHUSETTS
DIVISION OF EMPLOYMENT SECURITY

As Defined By
U.S. Office of Management & Budget
27 April 1973

March 1975

FITCHBURG — LEOMINSTER SMSA



UNEMPLOYMENT RATES
CITY & TOWN
ANNUAL AVERAGES
FOR 1978

c. Racial and Ethnic Characteristics

In 1970, the population of the SMSA was 98.9 percent white and 1.1 percent nonwhite. The racial mix of the area has remained relatively stable, and by fiscal year 1979, the white population of the area will total 96,924 or 99.7 percent, and the nonwhite population will total 1,157. In 1970 women accounted for 39.6 percent of the labor force, but their participation will continue to grow and projections indicate that by 1980 they will account for 42.4 percent of the total labor force.

Table 2

Population Change in the State,
The Fitchburg-Leominster SMSA
And The
Cities and Towns in the Area

	Population		1975-1980	
	1975	1980 1/	Number	Percent
Massachusetts	5,812,489	5,857,983	+45,494	+ 0.8
The SMSA	96,576	107,753	+11,177	+11.5
In Central Cities	74,469	83,072	+ 8,603	+11.5
Fitchburg	38,976	42,189	+ 3,213	+ 8.2
Leominster	35,493	40,883	+ 5,390	+15.1
Outside Central Cities	22,098	24,681	+ 2,583	+11.7
Middlesex County				
Shirley Town	4,844	4,712	- 132	- 2.7
Townsend Town	4,533	6,041	+ 1,508	+33.3
Worcester County				
Fitchburg City	38,976	42,189	+ 3,213	+ 8.2
Leominster City	35,493	40,883	+ 5,390	+15.1
Lunenburg Town	8,188	8,533	- 345	- 4.2
Westminster Town	4,533	5,395	+ 862	+19.0

Table 3

Population & Labor Force Compositon Projections
Fiscal Year 1980
Fitchburg-Leominster SMSA

	Population	Labor Force	Employment	Unemployment	Unemployment Rate	Labor Force Participation Rate
TOTAL	96,986	46,665	43,632	3,033	6.5	65.0
White Male	45,766	26,371	24,963	1,408	5.3	76.5
0-15	12,684	---	---	---	---	---
16-17	1,915	1,338	1,256	82	6.1	69.9
18-19	1,915	1,512	1,416	96	6.4	78.9
20-24	4,455	4,112	3,711	401	9.8	92.3
25-34	5,751	5,460	5,113	347	6.4	95.0
35-44	5,144	4,865	4,763	102	2.1	94.6
45-64	9,708	8,254	7,914	340	4.1	85.0
65+	4,194	830	790	40	4.8	19.8
White Female	50,066	19,788	18,206	1,582	8.0	57.3
0-15	12,160	---	---	---	----	---
16-17	1,876	1,418	1,278	140	9.9	75.5
18-19	1,876	1,320	1,214	106	8.0	70.4
20-24	4,383	2,855	2,596	259	9.1	65.1
25-34	6,842	3,934	3,625	309	7.9	57.5
35-44	5,173	3,397	3,183	214	6.3	65.7
45-64	10,894	6,198	5,710	488	7.9	56.9
65+	6,862	668	602	66	9.9	9.7
Non-White Male	625	336	306	30	8.9	66.3
0-15	185	---	NA	NA	NA	---
16-17	43	25	NA	NA	NA	58.7
18-19	43	23	NA	NA	NA	54.6
20-24	69	61	NA	NA	NA	89.3
25-34	48	45	NA	NA	NA	94.2
35-44	71	62	NA	NA	NA	87.0
45-64	148	119	NA	NA	NA	80.6
65+	18	0	NA	NA	NA	0.0
Non-White Female	529	171	157	14	8.1	44.3
0-15	164	---	NA	NA	NA	---
16-17	31	28	NA	NA	NA	90.7
18-19	31	0	NA	NA	NA	0.0
20-24	59	19	NA	NA	NA	31.7
25-34	51	27	NA	NA	NA	54.0
35-44	74	64	NA	NA	NA	86.1
45-64	87	27	NA	NA	NA	31.4
65+	32	5	NA	NA	NA	16.5

Source: Lawrence Berkeley Laboratory, University of California

Table 4
Characteristics of the Population
Projection Year 1980 Average
Fitchburg-Leominster SMSA

Age	Male		Female	
	White	Nonwhite	White	Nonwhite
TOTAL	45,766	625	50,066	529
0 - 15	12,684	185	12,160	164
16 - 19	3,830	86	3,752	62
20 - 24	4,455	69	4,383	59
25 - 34	5,751	48	6,842	51
35 - 44	5,144	71	5,173	74
45 - 64	9,708	148	10,894	87
65+	4,194	18	6,862	32

Total Population	96,986
Female	50,595
Black	836
Other	325

Source: Lawrence Berkeley Laboratory
University of California

Table 5
Nonagricultural Wage & Salary Employment Fiscal Years 1977 & 1978
Projected Fiscal Year 1979 & 1980
Fitchburg-Leominster SMSA

Industry	Actual		Projection	
	Fiscal Year Average 1977	Fiscal Year Average 1978	Fiscal Year Average 1979	Fiscal Year Average 1980
Nonagricultural Total	36,278	39,309	39,760	40,125
Manufacturing Total	16,911	17,317	17,340	17,395
Durable Goods	6,571	6,462	6,570	6,585
Primary Metals	212	237	240	250
Fabricated Metals	1,157	1,153	1,150	1,140
Machinery (Non. Elec.)	3,940	3,685	3,750	3,700
Furniture & Fixtures	464	501	510	525
Lumber	352	406	420	450
All Other Durable Goods*	446	480	500	520
Nondurable Goods Total	10,340	10,855	10,770	10,810
Rubber & Plastics	4,824	4,873	4,900	4,800
Paper & Allied Products	1,861	2,057	2,100	2,200
Apparel & Allied Products	810	891	900	950
Textiles	586	615	370	340
Printing & Publishing	753	743	760	780
Chemicals	697	758	800	820
All Other Nondurable Goods**	809	918	940	920
Nonmanufacturing Total	19,367	21,992	22,420	22,730
Contract Construction	960	1,070	1,180	1,100
Trans., & Public Utilities	1,330	1,300	1,300	1,400
Wholesale & Retail Trade	8,230	8,626	8,800	9,000
Fin., Ins., & Real Estate	1,192	1,164	1,150	1,140
Service, Misc., & Mining	5,065	5,242	5,400	5,500
Government Total***	2,590	4,590	4,590	4,590

* Petroleum; Stone, Clay & Glass; Electrical Machinery; Motor Vehicle, Professional and Scientific.

** Leather; Food & Miscellaneous Manufacturing.

*** Starting January, 1978 Government Figures Reflect True Employment Rather Than Estimates.

Note: Fiscal Year Runs From October 1 Through September 30.

III. Economic Assumptions

In making an economic forecast for fiscal year 1979 and 1980, it is assumed that the following conditions will prevail.

1. Inflation will be a serious threat to the economy. Its force will be lessened by Federal action, yet it will continue to be a dominant factor in the economy.

2. Employment levels will stabilize, with emphasis on replacement hiring.

3. The unemployment level will rise as entrants and reentrants experience difficulty in finding jobs.

4. The insured unemployment rate will rise moderately as the consumer spending level declines.

5. Consumer purchasing power will decline effecting employment levels in nondurable goods and service industries.

6. The energy crisis will increase the cost of home heating fuel, gasoline and petrolchemical products.

7. The institutional framework of the United States economy will not change radically.

8. Medium and small size firms will continue to invest and grow in this area.

9. The Massachusetts share of United States business will remain constant.

10. The local economy will do well as reflected by increased production but not by increased employment levels.

IV. Employment Development and Outlook by Industry Projected Through Fiscal Year 1980

The manufacturing sector did very well in 1978. It was hard hit in 1975, especially in this state and in this area. Since then production has gone up drastically. The companies which were just getting by either folded or moved elsewhere. Unemployment was high and the population of the state dropped, creating a vacuum. Since then the tables

Table 6
Changes in Nonagricultural Employment
by Industry
Fitchburg-Leominster SMSA

SIC	Industry	1977	1980*	Percent Change
	Total Nonagricultural	36,278	40,125	+ 9.6
	Manufacturing	16,911	17,395	+ 2.8
	Durable Goods	6,571	6,585	+ 0.2
25	Furniture	464	525	+11.6
33	Primary Metals	212	250	+15.2
35	Machinery (Exc. Elec.)	3,940	3,700	- 6.5
34	Fabricated Metals	1,157	1,140	- 1.5
24	Lumber	352	450	+21.8
	Other Durable Goods 1/	446	520	+14.2
	Nondurable Goods	10,340	10,810	+ 4.4
30	Rubber & Plastics	4,824	4,800	0.0
26	Paper & Allied Products	1,861	2,200	+15.4
28	Chemicals	697	820	+15.0
23	Apparel & Allied Products	810	950	+14.7
27	Printing & Publishing	753	780	+ 3.5
	All Other Nondurables 2/	1,395	1,260	-10.7
	Nonmanufacturing	19,367	22,730	+14.8
15-17	Contract Construction	960	1,100	+12.7
40-49	Trans., Comm., Utilities	1,330	1,400	+ 5.0
50-59	Wholesale & Retail Trade	8,230	9,000	+ 8.6
60-69	Finance	1,192	1,140	+ 4.6
70-89	Services	5,065	5,500	+ 8.0
90	Government	2,590	4,590	+44.0

1/ Includes SIC: 29, 32, 36, 37, 38

2/ Includes SIC: 20, 22, 31, 39

* Massachusetts Division of Employment Security Projections

have turned. Our manufacturing base has risen to a level that either equals or surpasses the national level. Production is strong and many businesses are literally bursting at the seams with orders well into the future. But things are changing, and in 1979 the economy will start to level off as it was expected to do. Business moves in a cycle. What was not expected was the sharp increases in inflation and further moves by oil producing countries to decrease the supply of oil. Consumers can live with inflation for a while, but eventually it starts to cut into their buying power. They in turn cut back in their buying which reduces consumption and demand. The picture should be clear by now that manufacturing will be cutting back in employment. The year 1980 will be a test year, to say the least. The number of people unemployed will rise, the rate of unemployment will rise. The present forecast is 6.5 percent, but it could be higher than that. The key to the situation is how this country reacts to the energy crisis. Panic will only aggravate the situation. In 1980 durable goods will hold their ground. This sector is usually stable and although there will be flucuation from industry to industry, overall stability with slight growth is predicted. Unfortunately this is the smallest area of employment. From 1977 to 1980, it is estimated that nondurable goods will increase in employment by 4.4 percent. There will be some large percentage increases but these will be in smaller industries. The larger industries will show little or negative growth. Statewide estimates have nondurable employment going down. The Primary Metals industry is expected to do very well for 1980. Demand is up for good quality goods and manufacturers are meeting the need. Competition is tight in this business but deleveries are still six months to a year behind. Production is up but employment is not. Some workers are putting in sixty hours a week. The price of raw materials is escalating all the time. One company indicated that an escalator clause is added into all contracts due to rapidly changing prices. Wages are good in this category. Even the lower paying jobs start at $5.00 an hour. This industry is also closely aligned with the computer industry which only strengthens its base.

The Fabricated Metals industry appears to be doing well. Although employment in this area has not changed and even appears to be dropping production has increased over the past few years. This theme will appear throughout most industries; production is doing well but not employment. Increased hours for presently employed workers and more automation appear to be the trend. What is of concern to this industry is the "Bottle Bill" which has a way of appearing year after year. Manufacturers feel recycling has worked and that the public is more cognizant of litter and its problems. Most companies do not favor this bill as they see it as a loss in capital and labor; apparently the public agrees.

The Nonelectrical Machining industry is one of the largest employers in the manufacturing sector. Recent employment trends are now showing that the actual number of people employed in this industry has dropped. From fiscal 1977 to fiscal 1978, employment went down by seven percent. Competition is tight and the price of steel has doubled since 1974. Even so, firms boast of full production, a backlog of orders, and orders up to 1980. The price of labor is expensive in this industry and employers look to automation in their plans for expansion. Most of its products are made to order making it virtually insensitive to the short run business cycle. What could give this industry a boost are new markets opening in Third World countries. For as they progress, it is exactly this type of product they will need.

Furniture and Fixtures had a good year for 1978 and expects a better year for 1979 and 1980. The energy crisis is playing a peculiar role in this industry. First, consumers buy more furniture during a gas shortage, since they have no place to go. Second, one manufacturer is changing their paints from oil to water base and lastly several manufacturers are using all scrap material to heat the building. Employment is expected to increase in this particular industry due to rising demand. The price of wood rose by almost 25 percent over last year leading at least one manufacturer to consider a synthetic product in its place. Right now the best markets for furniture, as a result of new housing, appears to be in Pennsylvania, Washington D.C. and New York State.

Lumber should pick up in employment this year. The demand for this raw material is exceptional and no let up in the present market is seen. What is peculiar to lumber industries is that there appears to be competition for labor especially in the lower paying jobs. This phenomenon has caused the industry to increase the entry wage level in order to attract the most productive and reliable workers. The demand for lumber is still very high overseas. This causes worry among manufacturers for sending lumber overseas only makes it more expensive here. There has always been talk of finding a substitute for lumber in production, but as of yet only God can make a tree. Properly harvested, trees can be a renewable resource.

"All Other Durable Goods" include Petroleum, Stone, Clay and Glass and Electrical Machinery. The largest petroleum industry is asphalt, which runs strong from April through November. The early 1970's were the best for business which has been dropping since. Route 190 should bring a lot of business into the area, much of which will rub off through new construction for homes, highways and business complexes. More than one tradesman in this area looks to Route 190 as the road to prosperity. One local dealer of petroleum products sees higher prices for diesel as its demand increases and that home heating fuel will increase by twenty cents per gallon by winter causing many home owners to convert to gas heat. There are price controls on gasoline but not on heating fuel.

The Rubber and Plastics industry had a good year in 1979 and a good year prior to that as far as that goes since April 1975 when the corner was turned. Employment has been slowly and steadly gaining in this industry. The year 1980 will be an interesting year to see how manufacturers will act to the present oil crisis. Plastics is a byproduct of oil. From February of 1974 to February of 1975 this industry lost 30 percent of its employment. The final outcome of this oil crisis is not expected to be as serious. As one manufacturer put it, anyone who is around now was around in 1975 and adapted to that crisis. For one thing, many manufacturers are maintaining a three to six month supply of raw material. New and more efficient machinery has been installed, and lastly, the shock effect has been taken away. Manufacturers now know how to cope with the situation rather then panicking. "Hard" employment figures have been just released for third quarter 1978. They show a slight downturn in employment. This was expected and will probably continue.

The Paper and Allied Products industry has been making excellent gains in both employment and production over the past two years. Since its low in May of 1975, employment has risen by 24 percent and is still growing. Production is strong seven days a week with 12 hour shifts for workers. A strike of paper mills on the west coast has helped business, although not exclusively. Energy is of major concern as it is a major cost in production and, as is true with other manufacturers, its rat material, pulp, has drastically increased in price. Employment should continue to increase.

The Apparel and Allied Products should post some slight gains in employment over the next year. This is supposed to be a dying industry, especially in this area, but from fiscal year 1977 to fiscal year 1978 the industry posted a nine percent gain in employment. Employment has a long way to go before it reaches its 1970 level of almost 1,400 workers, but if present hiring trends continue then at least we are heading in that direction.

A lot of contract stitching is still being sent to New Hampshire, where union activity is weak. The furnished material is then brought back to the factory for sorting and shipping. As one producer said, the price of textiles varies with the economy while the price of labor does not.

The Textile industry took a heavy loss last year with the closing of Fitchburg Yarn. Over 300 people lost jobs in that closing. Foreign competition hurts this industry constantly by flooding the market with cheaper goods. One producer stated that if mainland China ever gets into textiles, forget it. Energy backlash has hit the industry reflected by the high demand for sweaters made by natural fibers. Production is up in this industry with people working seven days a week at peak season. However, the trend is toward automation as labor is their biggest cost.

The Printing and Publishing industry is doing well in this area and should continue to do so. From January of 1971 to January of 1978 employment has increased by 55 percent, however, there are indicators that show that employment may have peaked in some businesses and that automation could start to cut into employment. Estimates show a 3.5 percent increase in employment, even that might be too high. Another reason being this industry is very sensitive to the business cycle and if we are headed toward, or already in a recession then orders for printed material should drop.

The Chemical industry should continue its growth in employment into 1980. For some time it was bogged down with the Environmental Protection Agency. That stage has passed and production is moving again. A note of caution, the present crisis could effect the chemical industry, to what extent and how severe is unknown at this time. Employment was fluctuating during the 1975 recession so it is hard to develope a trend for that time. But any increases in employment due to the oil crisis are highly unlikely

"All Other Nondurable Goods" include Leather Goods and Miscellaneous Manufacturing. Employment in Leather has gone down by 22 percent since 1971. This should not be a surprise to anyone from New England. Foreign imports have decimated this area with cheaper products. What leather manufacturers have done is dropped the cheaper product and put out a higher quality, high priced product. You sell less in the long run but the higher price makes up the difference. This trend was seen in other areas of manufacturing. Miscellaneous Manufacturing is expected to take a slight downturn. This area includes costume jewelry, toys, sporting goods-articles that are the first to feel the crunch in a recession.

Contract Construction has been showing some revival since last year. Over that time, employment has risen by 22 percent in the Fitchburg-Leominster SMSA. Most of the construction appears to be commerical with many businesses adding on to existing buildings. This could ignite residential construction but high interest rates have been dampening this market. What local contractors have been waiting for is the opening of Route 190. This will hopefully open up the area which had been virtually isolated up until now. Also what happens at Fort Devens will also have an effect on the local market, either one way or another. One estimate is that 25 percent of the present economy is related to Fort Devens. One thing seems for certain and that is a new shopping mall is going to be opened in this area. Where the mall will be located is still uncertain.

Transportation and Public Utilities - a regional transit system appears to be in the making for the Fitchburg-Leominster area. It is a slow process that has to be worked through step by step. Surveys have to be conducted, and trial runs made before the plan ever takes effect. Whether the town of Gardner will partake or not is unknown because there is talk of some sort of hookup to the Boston transit system. Either way, public transportation is becoming more attractive in light of the present oil crisis.

Public utilities, for the most part, are remaining status quo. They are monopolies which are regulated by public demand. If the population is fluctuating, employment should follow the population trends.

Wholesale and Retail Trade has been making some advances in employment lately, and this is a good sign. It is hard to tell where the employment is coming from but more than likely it is from new store openings. It now seems fairly certain that a shopping mall will be opened sometime in the future. Whether it will be a separate mall or an addition to an existing center is pure speculation at this point in time. Again many retailers are looking forward to the opening of Route 190 as a boom to business. However, as one employer put it, what brings traffic into the area also take it out.

Finance, Insurance and Real Estate - a visit to one of the local banking institutions was very enlighting. Business has been brisk lately as bankers try to keep ahead of the inflationary rate. Money does not sit in a bank, it has to be invested. Money must make money to retain its value. Home mortages are down but home improvement loans are up. Interest rates are being driven up by the Federal Government in order to hold down inflation, although some people will tell you that the Federal Government if one of the highest contributors to inflation.

The insurance industry is doing well. Employment is stable, and sales are good. As usual, good salespeople are hard to find, and training that individual takes a long time. Insurance is much more diversified than it used to be. Indeed, health insurance sales are almost non-existant now because everyone has it. Past indicators have shown that people buy more insurance in recessionary times. We shall see what the future holds.

The real estate perspective is very interesting. Sellers do not feel that high interest rates are hurting the home market, because lower initial deposits are required. Also, they expect a boom in residential living with the opening of Route 190. At this present time, there is much land speculation, for in three to four years the price of prime land in the area could double. As far as Fort Devens is concerned, it is felt that a decision should be made one way or another. Either move the troops in and get the economy going or close the base and put the land to some good use.

Service, Miscellaneous and Mining. This group of industries covers a broad range of activities. A random sampling of the category would look as follows: hotels, laundry, advertising, stamp collecting, computer data, automotive repair, amusement parks, health, legal, educational and social services. These industries cover a large segment of employment. It is encouraging to note that in one year employment has risen by 11 percent. When this sector makes substantial gains in employment, it is a good sign.

Government figures have been recently updated to reflect actual figures rather than a standard estimate. The increase shown in employment is a reflection of this. The number of people employed by the government will increase slightly over the next year or two.

V. Employment Development and Outlook by Occupation*

The following table is a breakout of job openings received and filled by occupational category and wage rate. These figures are cumulative from September 30, 1978 to April 30, 1979. Out of the job openings that were received, 59 percent were filled at an average salary of $3.61 per hour. The average wage last year was $3.40 per hour. With the exclusion of farming, one of the easiest occupations to fill was bench work (fabrication, assembly and repair) at a rate of 78 percent. Packaging and Material Handling was next at 69 percent and Motor Freight at 66 percent. The hardest occupation to fill was Professional, Technical and Managerial at 32 percent followed by sales at 37 percent. The highest paying occupation is Structural followed by Motor Freight and Transportation, presumably due to unionization. Clerical occupations have also a high wage at $4.28 per hour, much higher than the Worcester area.

VI. Recent Unemployment Trends and Outlook

Since the early 1970's the Fitchburg-Leominster SMSA has experienced unemployment rates higher than the state and the nation. This was especially true during the 1975 recession when the unemployment rate went as high as 15 percent in February of 1975 with 7,282 unemployed. Since then the number of unemployed has dropped to 3,121 and a rate of 6.3 percent for March 1979. If we look at the following graph, it shows us that lately the unemployment rate for the SMSA is comparable to the State and in some cases it is even lower than the nation. There is a feeling that a recession would hurt the rest of the nation more than this state or this area due to the makeup of the economy. This appears to be true, for the time being.

* See Appendix for Occupational Categories Definitions

Table 7

FITCHBURG-LEOMINSTER SMSA

04/30/79

JOB OPENINGS RECEIVED AND FILLED BY OCCUPATIONAL CATEGORY AND HOURLY WAGE RATE

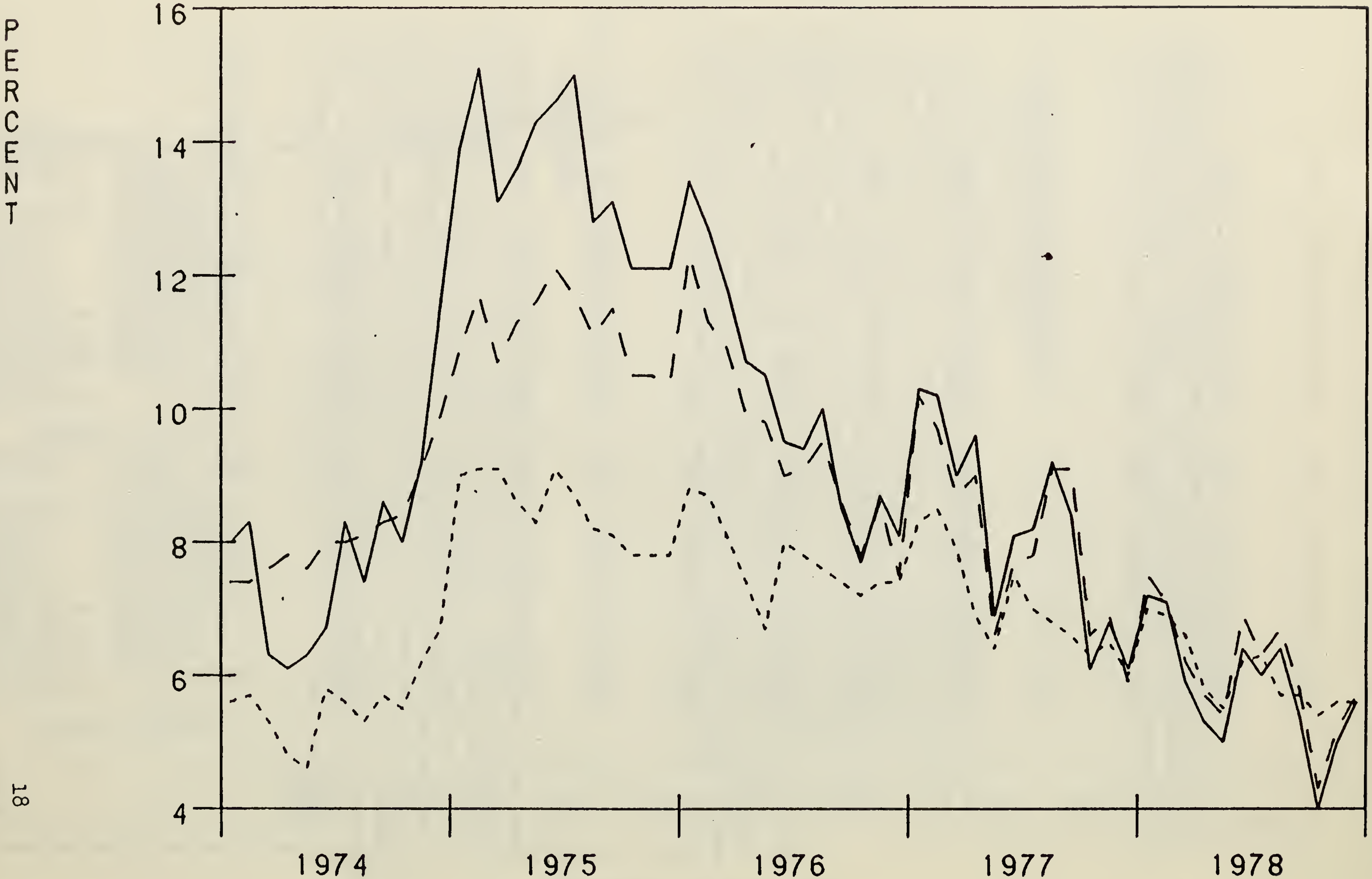
ITEM NO	ITEM		TOTAL NONAG AND AG.	UNDER $2.65	$2.65- $2.99	$3.00- $3.49	$3.50- $3.99	$4.00- $4.49	$4.50- $4.99	$5.00- $5.49	$5.50- $5.99	$6.00 & OVER	AVERAGE	OTHER*
A	B		C	D	E	F	G	H	I	J	K	L	M	N
	OPENINGS RECEIVED													
B07010	TOTAL		1637	2	309	596	273	205	105	70	15	56	3.69	6
B07015	0-1	PROF TECH MGR	165	0	1	29	21	41	39	15	8	11	4.64	0
B07020	20-24	CLERICAL	316	0	59	120	87	29	7	4	1	4	3.70	5
B07025	25-29	SALES	63	1	16	11	8	21	0	5	0	0	3.56	1
B07030	30	DOMESTIC	8	1	4	2	0	1	0	0	0	0	3.05	0
B07035	31-39	OTHER SERV	180	0	71	63	22	19	4	1	0	0	3.20	0
B07040	4	FARM F & F	42	0	25	6	5	5	1	0	0	0	3.12	0
B07045	5	PROCESSING	164	0	36	87	21	11	4	3	0	2	3.37	0
B07050	6	MACHINE TRADES	108	0	3	39	30	9	9	11	1	6	3.95	0
B07055	7	BENCH WORK	95	0	16	57	19	1	1	0	0	1	3.20	0
B07060	8	STRUCTURAL	169	0	0	18	21	48	36	26	3	17	4.61	0
B07065	90-91	MOTOR FRGT, TRANSP	58	0	6	11	10	14	3	2	0	12	4.16	0
B07070	92	PKG MTRL HNDL	266	0	72	152	29	6	1	3	0	3	3.15	0
B07075	93-97	OTHER	3	0	0	1	0	0	0	0	2	0	4.89	0
	OPENINGS FILLED													
B07085	TOTAL		963	2	254	324	162	88	63	27	7	35	3.61	1
B07090	0-1	PROF TECH MGR	53	0	0	8	11	9	17	4	2	2	4.41	0
B07095	20-24	CLERICAL	136	0	8	57	45	15	4	2	0	5	4.28	0
B07100	25-29	SALES	23	1	8	7	6	0	0	0	0	0	3.05	1
B07105	30	DOMESTIC	4	1	3	0	0	0	0	0	0	0	2.71	0
B07110	31-39	OTHER SERV	106	0	50	23	17	14	2	0	0	0	3.21	0
B07115	4	FARM F & F	86	0	76	2	3	4	1	0	0	0	2.83	0
B07120	5	PROCESSING	104	0	27	49	15	7	5	0	0	1	3.35	0
B07125	6	MACHINE TRADES	44	0	2	14	11	6	2	5	1	3	4.07	0
B07130	7	BENCH WORK	74	0	20	39	14	0	0	0	0	1	3.14	0
B07135	8	STRUCTURAL	108	0	4	16	10	22	32	12	3	9	4.41	0
B07140	90-91	MOTOR FRGT, TRANSP	38	0	4	7	6	7	0	2	0	12	4.40	0
B07145	92	PKG MTRL HNDL	184	0	51	101	24	4	0	2	0	2	3.15	0
B07150	93-97	OTHER	3	0	1	1	0	0	0	0	1	0	3.85	0

*1 OTHER INCLUDES WAGES NOT PAID ON A TIME BASIS.

SMSA 2600

MONTHLY YEAR TO DATE
FOR PERIOD ENDING 04/30/79

FITCHBURG-LEOMINSTER SMSA UNEMPLOYMENT RATE (SOLID)
VS MASS (DASH) AND U.S. (DOT)



LABOR AREA RESEARCH DEPT.
DIV OF EMPLOYMENT SECURITY

Table 8

Employment, Unemployment and Rate
From 1976 to Present by Month
Fitchburg-Leominster SMSA

Year	Employed	Unemployed	Unemployment Rate
1976 1/	43,781	4,904	10.1
January	42,481	6,576	13.4
February	42,638	6,190	12.7
March	42,756	5,706	11.8
April	42,869	5,155	10.7
May	42,708	4,991	10.5
June	44,991	4,733	9.5
July	45,143	4,690	9.4
August	44,836	4,918	9.9
September	44,912	4,190	8.5
October	44,648	3,716	7.7
November	44,022	4,185	8.7
December	43,363	3,802	8.1
1977 1/	43,351	3,895	8.2
January	42,079	4,829	10.3
February	42,323	4,786	10.2
March	42,493	4,210	9.0
April	43,074	4,577	9.6
May	44,560	3,306	6.9
June	44,409	3,916	8.1
July	43,013	3,862	8.2
August	43,192	4,353	9.2
September	43,109	3,946	8.4
October	43,977	2,865	6.1
November	43,796	3,212	6.8
December	44,186	2,876	6.1

Source: Newly Revised to CPS January, 1978
1/ Annual Average

Table 8 (continued)

Employment, Unemployment and Rate
from 1976 to Present by Month
Fitchburg-Leominster SMSA

Year	Employed	Unemployed	Unemployment Rate
1978 1/	44,590	2,738	5.8
January	44,426	3,464	7.2
February	44,270	3,396	7.1
March	44,715	2,808	5.9
April	44,300	2,460	5.3
May	44,395	2,331	5.0
June	45,626	3,114	6.4
July	45,956	2,922	5.0
August	45,106	3,081	6.4
September	43,731	2,489	5.4
October	44,304	1,832	4.0
November	44,362	2,340	5.0
December	43,886	2,616	5.6
1979			
January	46,582	3,752	7.5
February	46,907	3,206	6.4
March	46,371	3,121	6.3

Source: Newly Revised to CPS January, 1978
1/ Annual Average

Table 9

SELECTED CHARACTERISTICS OF INSURED UNEMPLOYED
FITCHBURG-LEOMINSTER LABOR AREA

DECEMBER 1978

	ALL PROGRAMS NUMBER	ALL PROGRAMS PERCENT	PRO-GRAMS NUMBER	PSE NUMBER
TOTAL	1028	100.0	1019	10
AGE				
UNDER 20	-	-	-	-
UNDER 25	161	15.7	161	-
25 - 34	281	27.3	277	5
35 - 44	163	15.9	163	-
45 - 54	163	15.9	158	5
55 - 64	181	17.6	181	-
65 & OVER	79	7.7	79	-
I.N.A.	-	-	-	-
SEX				
MEN	568	55.3	558	10
WOMEN	461	44.8	461	-
I.N.A.	-	-	-	-
ETHNIC GROUP				
WHITE	955	92.9	945	10
NON-WHITE	73	7.1	73	-
I.N.A.	-	-	-	-
SPANISH SURNAME	32	3.1	32	-
OCCUPATION				
PROF.,TECH.,MGT	154	15.0	149	5
CLERICAL/SALES	192	18.7	192	-
SERVICES	78	7.6	78	-
FARM,FISH,FOR.	35	3.4	35	-
PROCESSING	53	5.2	53	-
MACHINE TRADES	148	14.4	148	-
BENCH WORK	126	12.3	126	-
STRUCTURAL	126	12.3	126	-
MISC. WORK	116	11.3	111	5
I.N.A.	-	-	-	-
RECENT DURATION				
0-9 WEEKS	589	57.3	579	10
10-19 WEEKS	339	33.0	339	-
20-29 WEEKS	94	9.1	94	-
30 + WEEKS	7	.7	7	-

Table 9 (continued)

CONTINUED -1

	ALL PROGRAMS		PRO-GRAMS	PSE
	NUMBER	PERCENT	NUMBER	NUMBER
INDUSTRY ATTACH.				
MANUFACTURING	435	42.3	435	-
CON. CONSTRUCT	82	8.0	82	-
TRAN./UTIL.	29	2.8	29	-
WHOL/RET.TRADE	90	8.8	90	-
FIN/INS/R.E.	29	2.8	29	-
SERVICES	129	12.5	129	-
GOVERNMENTS	230	22.4	221	10
OTHERS	3	.3	3	-
I.N.A.	-	-	-	-
AVE. WEEKLY WAGE				
UNDER $100	132	12.8	132	-
$100 - $149	250	24.3	250	-
$150 - $199	363	35.3	359	5
$200 - $249	116	11.3	111	5
$250 - $299	64	6.2	64	-
$300 OR MORE	82	8.0	82	-
I.N.A.	21	2.0	21	-
SEPARATION REASON				
LAYOFF	866	84.2	856	10
QUIT VOL. RET.	-	-	-	-
QUIT PREGNANCY	3	.3	3	-
QUIT OTHER	41	4.0	41	-
DISCHARGES	18	1.8	18	-
LABOR DISPUTE	9	.9	9	-
OTHER/INA	92	8.9	92	-

Table 10

OCCUPATIONS OF THE INSURED UNEMPLOYED
FITCHBURG-LEOMINSTER LABOR AREA

DECEMBER 1978

	ALL AGES NUMBER	PER.	UNDER 45 YRS.	OVER 45 YRS.	NOT AVAIL
TOTAL	1028	100.0	606	423	-
0,1 PROF.,TECH.,MGR.	154	15.0	103	52	-
00,01 ARCH./ENGINEER	6	.6	3	3	-
02 MATH & PHY. SCIENCE	3	.3	-	3	-
04 LIFE SCIENCES	17	1.7	9	8	-
05 SOCIAL SCIENCES	3	.3	3	-	-
07 MEDICINE & HEALTH	15	1.5	9	6	-
09 EDUCATION	12	1.2	9	3	-
10 MUSEUM, LIBRARY	-	-	-	-	-
11 LAW & JURISPRUDENCE	6	.6	-	6	-
12 RELIGION & THEOLOGY	-	-	-	-	-
13 WRITING	-	-	-	-	-
14 ART	6	.6	6	-	-
15 ENTERTAINMENT & REC	-	-	-	-	-
16 ADMINISTRATIVE SPEC	29	2.8	23	6	-
18 MANAGRES & OFFICIAL	41	4.0	26	15	-
19 PROFESSIONAL, TECN	18	1.8	15	3	-
2 CLERICAL, SALES	192	18.7	135	58	-
20 STENO,TYPE,FILING	32	3.1	29	3	-
21 COMPUTING & ACCOUNT	90	8.8	59	31	-
22 MATERIAL & PROD REC	23	2.2	15	9	-
23 INFO & MESSAGE DIST	9	.9	9	-	-
24 MISC CLERICAL	12	1.2	12	-	-
25 SALESMEN, SERVICES	3	.3	3	-	-
26,28 SALES, COMMODITI	15	1.5	6	9	-
29 MERCHANDISING	9	.9	3	6	-
3 SERVICES	78	7.6	48	29	-
30 DOMESTIC SERVICE	3	.3	-	3	-
31 FOOD & BEVERAGE	35	3.4	23	12	-
32 LODGING	-	-	-	-	-
33 BARBERING,COSMETOLO	-	-	-	-	-
34 AMUSEMENT & REC	-	-	-	-	-
35 MISC PERSONAL SERV	15	1.5	12	3	-
36 APPAREL & FURNISH	-	-	-	-	-
37 PROTECTIVE SERV	10	1.0	4	6	-
38 BUILDING & RELATED	15	1.5	9	6	-
40-46 FARM/FISH	35	3.4	18	18	-
5 PROCESSING	53	5.2	29	23	-
50 PROCESSING OF METAL	-	-	-	-	-
51 ORE REFINING&FOUNDR	-	-	-	-	-

CONTINUED -1

Table 10 (continued)

	ALL AGES NUMBER	PER.	UNDER 45 YRS.	OVER 45 YRS.	NOT AVAIL
52 PROCESS/FOOD,TOBACO	3	.3	-	3	-
53 PROCESSING OF PAPER	3	.3	-	3	-
54 PROCES/OIL,COAL,GAS	-	-	-	-	-
55 CHEM,PLASTC,SYN,RUB	41	4.0	26	15	-
56 WOOD AND WOOD PROD	-	-	-	-	-
57 STONE,CLAY,GLASS	3	.3	3	-	-
58 LEATHER,TEXTILES	3	.3	-	3	-
59 PROCES/OCCUPATIONS	-	-	-	-	-

Table 10 (continued)

OCCUPATIONS OF THE INSURED UNEMPLOYED
FITCHBURG-LEOMINSTER LABOR AREA

DECEMBER 1978

	ALL AGES NUMBER	PER.	UNDER 45 YRS.	OVER 45 YRS.	NOT AVAIL
TOTAL	1028	100.0	606	423	-
6 MACHINE TRADES	148	14.4	58	91	-
60 METAL MACHINING	23	2.2	9	15	-
61 METALWORKING OCCUP	3	.3	3	-	-
62,63 MECHANICS REPAIR	18	1.8	15	3	-
64 PAPERWORKING	-	-	-	-	-
65 PRINTING	-	-	-	-	-
66 WOOD MACHING	3	.3	3	-	-
67 MACH STONE,CLAY,GLA	-	-	-	-	-
68 TEXTILE	87	8.5	19	67	-
69 MACHINE TRADES OCCU	15	1.5	9	6	-
7 BENCH WORK	126	12.3	64	62	-
70 FAB,ASSBLY&REPAIR	6	.6	3	3	-
71 FAB,REPAIR SCI&MED	6	.6	-	6	-
72 ASBLY&REPAIR ELECT	15	1.5	12	3	-
73 FAB,REPR ASSRT MATL	35	3.4	23	12	-
74 PAINTING, DECORAT	3	.3	3	-	-
75 FAB&REPR PLASTC SYN	23	2.2	12	12	-
76 FAB&REPR WOOD PROD	-	-	-	-	-
77 FAB&REPR SAND STONE	-	-	-	-	-
78 FAB&REPR TEXTILE	38	3.7	12	26	-
79 BENCH WORK OCCUPAT	-	-	-	-	-
8 STRUCTURAL WORK	126	12.3	82	44	-
80 METAL FABRICATING	6	.6	3	3	-
81 WELDERS, FLAME CUTT	-	-	-	-	-
82 ELECTRICAL ASSBLY	12	1.2	9	3	-
84 PAINT,PLASTER,WATER	15	1.5	6	9	-
85 EXCAVAT,GRAD,PAVE	6	.6	3	3	-
86 CONSTRUCTION OCCUPA	79	7.7	62	18	-
89 STRUCTURAL WORK OCC	9	.9	-	9	-
9 MISCELLANEOUS	116	11.3	69	47	-
90 MOTOR FREIGHT	43	4.2	28	15	-
91 TRANSPORTATION OCCU	9	.9	6	3	-
92 PACKAGING&MATERIALS	62	6.0	35	26	-
93 EXTRACT OF MINERALS	-	-	-	-	-
94 LOGGING OCCUPATIONS	-	-	-	-	-
95 PROD&DIST,UTILITIES	-	-	-	-	-
96 AMUSE, REC., MOVIES	3	.3	-	3	-
97 GRAPHIC ART WORK	-	-	-	-	-
999 INFO NOT AVAILABLE	-	-	-	-	-

Table 11

AGE AND AVERAGE WEEKLY EARNINGS OF THE INSURED UNEMPLOYED
FITCHBURG-LEOMINSTER LABOR AREA

DECEMBER 1978

	TOTAL		MALES		FEMALES	
	NUMBER	PER.	NUMBER	PER.	NUMBER	PER.
TOTAL	1028	100.0	568	100.0	461	100.0
AGE GROUPS						
TOTAL	1028	100.0	568	100.0	461	100.0
UNDER 20	-	-	-	-	-	-
UNDER 25	161	15.7	88	15.5	73	15.8
25 - 34	281	27.3	194	34.2	88	19.1
35 - 44	163	15.9	88	15.5	75	16.3
45 - 54	163	15.9	84	14.8	79	17.1
55 - 64	181	17.6	70	12.3	110	23.9
65 & OVER	79	7.7	44	7.7	35	7.6
WEEKLY EARN.						
TOTAL	1008	98.1	556	97.9	452	98.0
UNDER $100	132	12.8	44	7.7	88	19.1
$100-$149	250	24.3	94	16.5	156	33.8
$150-$199	363	35.3	197	34.7	167	36.2
$200-$249	116	11.3	84	14.8	32	6.9
$250-$299	64	6.2	62	10.9	3	.7
$300 +	82	8.0	76	13.4	6	1.3

Table 12

DURATION MOST RECENT SPELL (ALL PROGRAMS)
FITCHBURG-LEOMINSTER LABOR AREA

DECEMBER 1978

	TOTAL	0-4 WEEKS	5-14 WEEKS	15-26 WEEKS	27+ WEEKS
TOTAL	1028	304	469	233	22
OCCUPATION					
PROF,TECH,MGT	154	37	73	44	-
CLERICAL/SALES	192	41	102	37	12
SERVICES	78	26	32	12	7
FARM,FISH,FURS	35	12	12	12	-
PROCESSING	53	18	21	15	-
MACHINE TRADES	148	76	40	32	-
BENCH WORK	126	32	73	18	3
STRUCTURAL	126	38	62	26	-
MISC. WORK	116	23	55	38	-
I.N.A.	-	-	-	-	-
INDUSTRY ATTACH.					
MANUFACTURING	435	158	178	97	3
CONSTRUCTION	82	32	44	6	-
TRANS/UTIL	29	6	21	3	-
WHOL/RET/TRADE	90	26	44	14	6
FIN/INS/R.E.	29	12	9	6	3
SERVICES	129	35	50	44	-
GOVERNMENTS	230	34	122	64	10
OTHERS	3	-	3	-	-
I.N.A.	-	-	-	-	-
MALES	568	184	233	141	10
UNDER 20	-	-	-	-	-
UNDER 25	88	18	47	21	3
25 - 34	194	70	78	41	4
35 - 44	88	23	44	21	-
45 - 54	84	19	44	21	-
55 - 64	70	32	21	18	-
65 & OVER	44	21	-	21	3
FEMALES	461	120	236	93	12
UNDER 20	-	-	-	-	-
UNDER 25	73	21	35	15	3
25 - 34	88	12	50	23	3
35 - 44	75	12	55	9	-
45 - 54	79	23	47	6	3
55 - 64	110	44	35	28	3
65 & OVER	35	9	15	12	-

For 1980, the unemployment rate is projected to be 6.5 percent with 3,033 unemployed. It could be higher due to the oil crisis and this area's dependence on oil byproducts. But this particular recession appears to be more of a function of inflation rather than unemployment, as was true in 1975. Inflation is now running at or near double digits. What this means is that you buy less with the same amount of money. You have to make more money to maintain your standard of living, rather than think of bettering yourself. Many factory workers are putting in 50 to 60 hours a week to combat inflation. What this means is that production is being done by the existing labor force rather than the hiring of new workers. If we look at Table 8 we see more workers unemployed in the 5-14 week range than any other. They cannot find work. Production is increasing but not hiring. Therefore the number of people unemployed will increase. There could be some positive aspects in the situation, and that is, when production slows down, and it is assumed that it will, employees will not be laid off but will have working hours cut back.

Additional Planning Data Projectsion
Projected Fiscal Year 1980 Average

Employed Part Time for Economic Reasons

Category	Total Employment	Part Time Employment for Economic Reasons
Total	43,632	1,644
White Male	24,963	723
White Female	18,206	892
Nonwhite Male	306	17
Nonwhite Female	157	12

Economically Disadvantaged (18 and over)

Total	5,558
White	5,396
Black	42
Other	64
Spanish	56

VII. Individuals in Need of Manpower Services

It is estimated that by 1980 unemployment will average 3,033. It is safe to assume that most of these people will be needing services of one sort or another in their attempts to find suitable employment. For example, it is interesting to note that women accounted for 51 percent of registered applicants. Last year it was 47 percent. It is projected that women will account for 54 percent of all part-time employees. As the economy declines, it is expected that women will attempt to enter the civilian labor force in order to supplement family incomes. Also out of all applicants registered 21 percent were under 22 while 16 percent were 45 and over, 8 percent were Vietnam Era Veterans and 9 percent were minorities. One area of particular concern is education. Out of all registered applicants 36 percent did not graduate from high school.

VIII. Labor Supply/Demand Imbalances

Professional, Technical and Managerial: This was the only category to experience an increase in job vacancies, an increase of 21 percent. Some areas that experienced noteable increases were Mathematics and Physical Sciences, Medicine and Health, Education, and Service Industry Management.

Clerical and Sales Work: Openings in this category dropped by 19 percent. Openings for salespeople alone fell by almost 350 percent in the post-holiday period.

Services: Service-related positions fell by 57 percent from October to March. The largest subcategory, Food and Beverage Preperation, fell by almost 80 percent.

Machine Trade: This particular category remained relatively stable, dropping only 6.3 percent. This area is big on manufacturing, and jobs are usually available in this category. Some subcategories even experienced increases in positions. These were Metalworking, Printing and Wood Machinery. Machinist and Tool Makers remained the same.

Bench Work occupations fell in job orders by 64.7 percent from October of last year. What is significant in this particular occupation is that two sub-categories actually had increases. One was in fabrication of miscellaneous plastic products and the other was in fabrication and repair of wood products. This should be interpreted as a good sign for our area

CHARACTERISTICS OF APPLICANTS

Table 13
Fitchburg-Leominster SMSA
October 1978-March 1979

CHARACTERISTICS OF APPLICANTS	REGISTERED APPLICANTS	INDIVIDUALS COUNSELED	PLACED AFTER COUNSELING	ENROLLED IN TRAINING	TOTAL APPLICAN[TS] PLACED IN JOBS
Age - All Ages	5,845	399	53	11	805
Under 20 years	672	58	6	2	119
20 - 21	572	27	6	0	118
22 - 24	847	50	5	1	142
25 - 29	1,044	48	6	2	140
30 - 39	1,397	100	18	4	148
40 - 44	383	26	6	0	40
45 - 54	576	54	1	2	65
55 - 64	316	30	5	0	32
65 years or older	38	6	0	0	1
Sex	5,845	399	53	11	805
Men	2,873	248	35	7	449
Women	2,972	151	18	4	346
Highest Grade of School Completed	5,845	399	53	11	805
0 - 7	268	44	8	0	29
8 - 11	1,827	164	21	3	252
12	2,487	118	13	5	383
Over 12 years	1,263	73	11	3	141
Handicapped	358	84	7	1	36
Welfare	1,409	94	10	4	106
Ethnic Group	5,845	399	53	11	805
White	5,301	365	48	11	732
Black	220	11	1	0	31
Other	31	3	0	0	7
Spanish Surname	293	20	4	0	35
Vietnam - ERA Veteran	461	36	5	0	80

Form 0233-H2 New 8-76 Source: ESARS

Table 14

THE COMMONWEALTH OF MASSACHUSETTS
DIVISION OF EMPLOYMENT SECURITY

OCCUPATIONS OF APPLICANTS IN THE ACTIVE FILES IN EMPLOYMENT SERVICE OFFICE, BY SELECTED CHARACTERISTICS
Fitchburg - Leominster SMSA
Cumulative from October 1978 through March 1979

SELECTED OCCUPATIONAL GROUP 1/	ALL	APPLICANT CHARACTERISTICS				
		FEMALE	AGE		VETERAN	MINORIT'
			Under 22	45 and Over		
ALL OCCUPATIONS	2,685	1,438	431	442	520	253
PROFESSIONAL TECHNICAL & MANAGERIAL WORK						
045 Psychology	20	10	0	4	8	1
079 Medicine and Health nec 2/	22	19	3	1	2	2
169 Administrative Specializations nec	24	14	0	6	7	2
185 Wholesale & Retail Trade Management	21	9	0	3	6	0
187 Service Industry Management	23	10	1	9	9	2
195 Social & Welfare Work	35	26	0	4	7	3
CLERICAL AND SALES WORK						
201 Secretarial Work	32	32	10	4	1	4
203 Typists and Typewriting Machine Operator	42	42	10	2	4	5
209 Stenography, Typing, Filing and Related Occupations, nec	76	70	15	9	5	5
210 Bookkeeping	23	21	0	9	0	2
211 Cashiering	55	53	8	4	3	6
216 Accounting & Statistical Clerks	21	18	1	1	1	1
219 Computing & Account Recording 2/	81	76	9	8	3	5
222 Clerical Work, Shipping & Receiving	43	12	4	7	18	1
237 Information and Reception Clerks	21	21	5	3	0	1
279 Sales Occupation, Miscellaneous Commodities	22	11	3	3	3	0
SERVICES						
311 Food Serving	85	80	18	14	0	1
313 Chefs & Cooks, Hotels & Restaurants	26	6	8	4	8	3
332 Hairdressers and Cosmetologists	20	18	0	2	1	0
355 Attendant Work, Hosps., Morgues & Rel. Health Service	72	66	8	10	5	7

Source: ESARS Table 96 Report No. MA5-62
1/ Occupational Group with at least 20 Registered Applicants in the Active File
2/ N.E.C. -- Not elsewhere classified

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Table 14 (continued)

THE COMMONWEALTH OF MASSACHUSETTS
DIVISION OF EMPLOYMENT SECURITY

OCCUPATIONS OF APPLICANTS IN THE ACTIVE FILES IN EMPLOYMENT SERVICE OFFICE, BY SELECTED CHARACTERISTICS
Fitchburg - Leominster SMSA
Cumulative from October 1978 through March 1979

SELECTED OCCUPATIONAL GROUP 1/	ALL	APPLICANT CHARACTERISTICS				
		FEMALE	AGE		VETERAN	MINORIT'
			Under 22	45 and Over		
381 Cleaning & Related Services	23	4	3	11	7	4
PROCESSING						
556 Casting & Molding 2/	125	85	14	19	7	33
MACHINE TRADES						
620 Motorized Vehicle & Engineering Equip. Repairing	20	0	5	1	8	1
BENCH WORK						
739 Fabrication & Repair of Products Made from Assorted Materials 2/	43	39	4	6	2	5
STRUCTURAL WORK						
860 Carpentry & Related Work	41	0	6	8	14	1
869 Miscellaneous Construction Work 2/	82	3	26	2	22	5
899 Miscellaneous Structural Work 2/	22	0	2	9	13	1
MISCELLANEOUS WORK						
904 Trailer-Truck Driving	35	0	2	8	20	3
905 Heavy Truck Driving	32	1	5	2	14	2
920 Packaging	123	109	27	22	2	14
922 Moving & Storing Materials and Products, nec.	26	6	13	4	7	0
929 Packaging & Materials, Handling 2/	176	43	58	20	44	32

Source: ESARS Table 98 Report No. MA5 62
1/ Occupational Group with at least 20 Registered Applicants in the Active File
2/ N.E.C. -- Not elsewhere classified

Structural Work has been decreasing in employment since the early 1970's. The largest subcategory, construction, fell by 96 percent in job orders. The overall loss was 84 percent.

Miscellaneous Work: The decrease in this particular group of jobs was not as great (-36 percent) as in the other occupations. Decreases were constant thoughout with the exception of packaging occupations, which rose slightly.

IX. Employment and Training Programs

A. The Work Incentive Program (WIN)

This program is administered by the Division of Employment Security with referrals by the Welfare Department. The program concentrates on welfare recipients covered by aid the families with dependent children (A.F.D.C.) The WIN Program provides for the rehabilitation of the welfare clients, rather than a commitment to long-term maintenance. Its goal is to move men, women and out-of-school youths, age 16 or older, from the welfare rolls into meaningful, permanent employment. The accumulative record of the Fitchburg WIN Team is shown in the following table.

WIN Team Data
October 1, 1978 - March 31, 1979

Registration	1,282*
Appraisals	361
Institutional Training	10
Work Experience	5
Suspense (to Non-WIN OJT or Training)	174
On-The-Job-Training	8

* Includes carry-in from prior fiscal years.

Table 15
Comparison of Job Vacancies by Major Occupational Categories
Worcester Job Bank
October 1978 - March 1979

Major Occupational Categories	October 1978		March 1979	
	Total	Percent	Total	Percent
ALL OPENINGS	5,101	100.0	3,982	100.0
Professional, Technical & Managerial	514	10.0	650	16.3
Clerical & Sales Work	1,223	24.0	1,029	25.8
Services	889	17.4	566	14.2
Farming, Fishery, Forestry & Rel. Work	102	2.0	141	3.5
Processing	289	5.7	140	3.5
Machine Trades	441	8.7	415	10.4
Bench Work	415	8.1	252	6.4
Structural Work	598	11.7	325	8.2
Miscellaneous Work	630	12.4	464	11.7

Table 16
Supply and Demand of Labor
April 1979
Fitchburg-Leominster SMSA

Occupational Categories	Active Applicants	Openings Total	Ration Of Applicants to Openings
Professional, Technical and Managerial	307	165	1.9 to 1
Clerical and Sales	491	377	1.3 to 1
Services	392	188	2.1 to 1
Farming, Fishing and Forestry	46	11	4.2 to 1
Processing	155	164	0.9 to 1
Machine	117	108	1.1 to 1
Benchwork	150	95	1.6 to 1
Structural	215	151	1.4 to 1
Miscellaneous	407	327	1.2 to 1
TOTAL	2,418	1,604	1.5 to 1

Source: Table #96 ESARS
Fitchburg-Leominster SMSA

THE COMMONWEALTH OF MASSACHUSETTS
DIVISION OF EMPLOYMENT SECURITY

JOB OPENINGS RECEIVED AND FILLED, BY MAJOR OCCUPATIONAL CATEGORY
Table 17
Fitchburg-Leominster SMSA
Cumulative October 1978-April 1979

OCCUPATIONAL GROUP	OPENINGS 1/			
	RECEIVED		FILLED	
	Number	Percent	Number	Percent
All Occupational Groups	1,637	100.0	963	100.0
Professional, Technical, Managerial	165	10.1	53	5.5
Clerical	316	19.3	136	14.1
Sales	63	4.0	23	2.4
Domestic	8	0.4	4	0.4
Other Services	180	11.0	106	11.0
Farming, Fishing, Forestry	42	2.6	86	8.9
Processing Occupations	164	10.0	104	10.8
Machine Trades	108	6.6	44	4.6
Bench Work	95	5.8	74	7.7
Structural Work	169	10.3	108	11.2
Motor Freight Transportation	58	3.5	38	4.0
Packing, Material Handling	266	16.2	184	19.1
All Other	3	0.2	3	0.3

Source: ESARS Table A07 Group Report No. MA5-49A

1/ Total Agricultural and Nonagricultural Openings.

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THE COMMONWEALTH OF MASSACHUSETTS
DIVISION OF EMPLOYMENT SECURITY

Table 18
A Comparison of Job Openings Received and Filled, by Major Occupational Category
Fiscal 1977 to Fiscal 1978
By Rank

OCCUPATIONAL GROUP	OPENINGS 1/			
	RECEIVED		FILLED	
	FY 1977	FY 1978	FY 1977	FY 1978
All Occupational Groups				
Professional, Technical, Managerial	6	4	6	6
Clerical	3	1	13	12
Sales	10	11	3	3
Domestic	13	13	1	1
Other Services	2	3	11	11
Farming, Fishing, Forestry	1	7	9	9
Processing Occupations	8	5	7	10
Machine Trades	9	9	5	5
Bench Work	7	8	8	7
Structural Work	5	6	10	8
Motor Freight Transportation	11	10	4	4
Packing, Material Handling	4	2	12	13
All Other	12	12	2	2

Source: ESARS Table A07 Group Report No. MA5-49A

1/ Total Agricultural and Nonagricultural Openings.

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B. CETA

The Comprehensive Employment and Training Act of 1973 (CETA) was passed with the purpose of providing job training and unemployment opportunities for economically disadvantaged, unemployed and underemployed persons and to assure that training and other services lead to maximum employment opportunities. Under CETA the primary responsibility for manpower training is on the prime sponsors, cities with a population of 100,000 or more, and consortiums, groups of smaller cities and towns. The Gardner Consortium serves the following twenty-six cities and towns.

Ashburnham	Groton	Oakham
Ashby	Hardwick	Pepperell
Ayer	Harvard	Princeton
Barre	Hubbardston	Shirley
Berlin	Lancaster	Sterling
Bolton	Leominster*	Templeton
Clinton	Lunenburg*	Townsend*
Fitchburg*	New Braintree	Westminster*
Gardner		Winchendon

* Fitchburg-Leominster SMSA

Title IIB

Formerly known as Title I
Services include: Classroom training, work experience, OJT and services to participants (counseling, supportive services, etc.)

ELIGIBILITY FOR PARTICIPATION IN TITLE II B

1. United States citizen or alien who is permitted to accept permanent employment by Immigration and Naturalization Service; and

2. Economically disadvantaged; and

3. Unemployed, or
   Underemployed, or
   In-School Youth

Title IIC

New Programs: Upgrading and Retraining Programs designed to offer additional opportunities to those locked into low paying, low-skill, dead-end jobs.
Services include: classroom training, OJT, supportive services.

ELIGIBILITY FOR PARTICIPATION IN TITLE II C UPGRADING

1. United States citizen or alien who is permitted to accept permanent employment by Immigration and Naturalization Service; and

2. Operating at less than full skill potential; and

3. Working for at least the prior six months with the same employer in an entry level, unskilled or semi-skilled position, or a position with little or no advancement opportunity in a normal promotional line.

ELIGIBILITY FOR PARTICIPATION IN TITLE II C RETRAINING

1. United States citizen or alien who is permitted to accept permanent employment by Immigration and Naturalization Service; and

2. Have received a bona fide notice of impending layoff within the last six months; and

3. Have been determined by Prime Sponsor as having little opportunity to be reemployed in same or equivalent occupation or skill level within the labor market area.

TITLE II D PSE — Formerly known as Title II-PSE
Services include: public service employment, classroom training, and services to participants (counseling, job development, etc.)

ELIGIBILITY FOR PARTICIPATION IN TITLE II D PSE

1. United States citizen or alien who is permitted to accept permanent employment by Immigration and Naturalization Service; and

2. A resident of the prime sponsor's jurisdiction; and

3. Economically disadvantaged, unemployed at time of enrollment, and unemployed during 15 of the past 20 weeks, or

   A member of a family which is receiving Public Assistance; and

4. Not have voluntarily terminated, without good cause, last full-time employment during past six months.

Title IVA — Formerly known as Title III C.
Programs for youth under Youth Community Conservation and Improvement Projects (YCCIP) and Youth Employment and Training Programs (YETP) are designed to provide classroom training, OJT, work experience and services to participants.

ELIGIBILITY FOR PARTICIPATION IN YCCIP

1. United States citizen or alien who is permitted to accept permanent employment by Immigration and Naturalization Service; and

2. Aged 16 through 19 years, inclusive; and

3. Unemployed; and

4. Economically disadvantaged; and

5. Has not had previous enrollments in YCCIP exceeding 12 months.

ELIGIBILITY FOR PARTICIPATION IN YETP

1. United States citizen or alien who is permitted to accept permanent employment by Immigration and Naturalization Service; and

2. Aged 16 through 21 years inclusive; and

3. A member of a family with total family income at or below 85 percent of lower living standard income level; and

4. Unemployed; or
Underemployed; or
In School

Title IV C

Summer Youth Employment Program
Services include: work experience, remedial education, assessment, classroom training and services to participants.

ELIGIBILITY FOR PARTICIPATION IN SUMMER YOUTH EMPLOYMENT PROGRAM

1. United States citizen for alien who is permitted to accept permanent employment by Immigration and Naturalization Service; and

2. Economically Disadvantaged; and

3. Aged 14 through 21 years, inclusive

TITLE VI PSE

Formerly called Titles VI and VI B
Services include: public service employment, training and services to participants (counseling, job development etc.)

ELIGIBILITY FOR PARTICIPATION IN TITLE VI PSE

1. United States citizen or alien who is permitted to accept permanent employment by Immigration and Naturalization Service; and

2. Resident of the prime sponsor's jurisdiction; and

3. A member of family which has been receiving Public Assistance for ten of the last twelve weeks; or
Unemployed at time of enrollment; and
Unemployed at least 10 out of 12 weeks prior to enrollment; and
Have a family income which does not exceed 100% of the lower living standard income level based on the three months prior to application.

4. Not have voluntarily terminated, without good cause, last full-time employment during past six months.

A P P E N D I X

CRITICAL ECONOMIC VARIABLES

1. The OPEC hike, the Iranian oil cutoff, and Saudia-Arabia's de-emphasis of the lighter crudes combined with oil price deregulation causing rampant price increases would effect the levels of employment in the following industries.

SIC 15	General Building Contractors
SIC 16	Heavy Construction Contractors
SIC 17	Special Trade Contractors
SIC 24	Lumber and Wood Products
SIC 3079	Miscellaneous Plastics Products
SIC 371	Motor Vehicles and Equipment
SIC 3861	Photographic Supplies
SIC 45	Air Transportation
SIC 554	Gasoline Service Stations

2. Political unrest, and economic instability in Zaire, may increase the cost of copper, cobalt, and industrial diamonds, raw materials essential to (SIC 34), Fabricated Metal Products except Machinery and Transportation Equipment.

3. Barring worldwide political disruptions, employment will continue to increase in (SIC 34) Fabricated Metal Products except Machinery and Transportation Equipment and (SIC 38) Measuring, Analyzing, and Controlling Instruments.

4. Department of Defense and Department of Energy prime contract spending will remain at the same level or increase slightly thus maintaining employment levels in the Electron Tube Industry (SIC 367), the Communications Industry (SIC 3662), Engineering Services Industry (SIC 8911), and Aircraft Engines Industry (SIC 3724).

5. Spending by state and local governments will gradually level.

6. The dislocation caused by increased transportation costs of raw materials, finished goods, and the labor pool will have an impact on the general economy.

Characteristics of Population and Labor Force
Fitchburg-Leominster SMSA

	1970*		1980**	
	Number	Percent	Number	Percent
Total Population	97,267	100.0	96,986	100.0
Male	46,409	47.7	46,392	47.8
Female	50,858	52.3	50,594	52.2
White	96,235	98.9	95,825	98.8
Nonwhite	1,032	1.1	1,161	0.2
Total Labor Force	42,059	100.0	46,665	100.0
Male	25,393	60.4	26,699	57.2
Female	16,666	39.6	19,966	42.8
White	41,638	99.0	46,159	98.9
Nonwhite	421	1.0	507	1.1
Total Employment	40,334	100.0	43,632	100.0
Male	24,545	60.9	25,260	57.9
Female	15,789	39.1	18,372	42.1
Nonwhite	405	1.0	461	1.1
Total Unemployment	1,725	100.0	3,033	100.0
Male	848	49.2	1,439	47.4
Female	877	50.8	1,594	52.6
White	1,709	99.1	2,988	98.5
Nonwhite	16	0.9	45	1.5

* 1970 United States Census
** Massachusetts Division of Employment Security Estimates

Fitchburg-Leominster SMSA
Employment by City and Town
1974 - 1978

Year	Fitchburg	Leominster	Lunenberg	Shirley	Townsend	Westminster	Total
1974	19,050	14,893	3,305	1,771	2,026	1,961	43,006
1975	18,527	14,483	3,214	1,723	1,970	1,907	41,824
1976	19,394	15,161	3,364	1,803	2,062	1,996	43,781
1977	19,203	15,012	3,331	1,786	2,042	1,977	43,351
1978	19,752	15,441	3,426	1,837	2,100	2,033	44,590

Source: Department of Employment Security using the Current Population Survey

1977 Average Annual Pay*
By Standard Metropolitan Statistical Area

SMSA	Average Annual Pay (in Dollars)
Boston-Lowell-Brockton Lawrence-Haverhill	11,386
Worcester-Fitchburg-Leominster	10,329
Springfield-Chicopee-Holyoke	10,154
Providence-Warwich-Pawtucket Rhode Island-Massachusetts	9,479
New Bedford-Fall River	9,037
Massachusetts	10,972

Source: United States Department of Labor

* Annual Payroll Divided by Average Employment

-TOTAL ES JOB BANK OPENINGS AND AVERAGE PAY
BY SELECTED INDUSTRY GROUP
WORCESTER MASSACHUSETTS *
MARCH, 1979

SELECTED INDUSTRY GROUP	OPENINGS AVAILABLE		OPENINGS UNFILLED		OPENINGS UNFILLED 30 DAYS	
	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY
TOTAL OPENINGS, ALL INDUSTRIES	3,982	$ 7,994	2,706	$ 8,094	1,271	$ 8,145
TOTAL AGRICULTURE, FORESTRY, AND FISHING (01-09)	34	6,848	29	6,809	7	7,411
AGRICULTURAL PRODUCTION--CROPS (01)	8	6,240	7	6,240	0	0
AGRICULTURAL PRODUCTION--LIVESTOCK (02)	2	7,998	1	7,675	1	7,675
AGRICULTURAL SERVICES (07)	21	6,909	18	6,904	3	7,453
FORESTRY (08)	3	7,280	3	7,280	3	7,280
TOTAL CONSTRUCTION (15-17)	193	9,019	130	8,871	31	9,931
BLDG. CONST.-GEN. CONTR. & OPER. BLDR. (15)	54	9,396	35	9,902	13	8,160
CONST. OTHER THAN BLDG.-GEN. CONTRACT. (16)	13	9,820	7	9,806	3	8,667
CONSTRUCTION--SPECIAL TRADE CONTRACTORS(17)	126	8,774	88	8,387	15	11,719
TOTAL MANUFACTURING (20-39)	1,044	7,852	601	8,089	292	8,053
DURABLE GOODS (24,25,32-39)	586	8,132	350	8,366	177	8,177
LUMBER AND WOOD PROD., EXCEPT FURNITURE(24)	22	7,940	14	7,358	4	7,124
FURNITURE AND FIXTURES (25)	92	6,743	42	6,771	27	6,870
STONE, CLAY, GLASS, AND CONCRETE PROD. (32)	19	9,061	15	9,370	8	9,425
PRIMARY METAL INDUSTRIES (33)	21	8,992	13	9,365	7	9,306
FAB. MET. PRO., EX. MACH.&TRANS. EQUIP.(34)	188	7,667	118	7,699	59	7,693
MACHINERY, EXCEPT ELECTRICAL (35)	119	9,511	70	10,197	36	10,162
ELEC. AND ELEC. MACH., EQUIP., AND SUP.(36)	52	8,293	32	8,644	15	8,466
TRANSPORTATION EQUIPMENT (37)	11	8,708	6	8,070	6	8,070
INSTRUMENTS, OPTICAL GOODS, TIME PIECES(38)	40	8,877	27	9,183	5	7,212
MISCELLANEOUS MANUFACTURING INDUSTRIES (39)	22	7,055	13	6,403	10	6,157
NONDURABLE GOODS (20-23,26-31)	458	7,494	251	7,703	115	7,862
FOOD AND KINDRED PRODUCTS (20)	32	7,633	20	8,000	6	8,399
TOBACCO MANUFACTURES (21)	3	7,398	1	6,240	1	6,240
TEXTILE MILL PRODUCTS (22)	80	7,147	42	7,392	26	6,966
APPAREL AND OTHER FINISHED PROD.,FAB. (23)	23	7,226	12	7,410	7	7,518
PAPER AND ALLIED PRODUCTS (26)	18	8,142	11	7,476	10	7,458
PRINTING, PUBLISHING, AND ALLIED IND. (27)	31	8,185	22	8,437	8	9,360
CHEMICALS AND ALLIED PRODUCTS (28)	25	9,209	12	8,032	7	8,124
RUBBER AND MISC. PLASTICS PRODUCTS (30)	193	7,553	103	7,988	35	8,781
LEATHER AND LEATHER PRODUCTS (31)	53	6,419	28	6,485	15	6,670
TOTAL TRANS., COMM., ELEC., GAS, SAN. SVC (40-49)	44	10,363	22	9,794	9	9,962
LOCAL TRANSIT AND INTERURB. HIWWY TRANS(41)	4	8,251	3	9,256	3	9,256
MOTOR FREIGHT TRANSPORT. AND WAREHOUS. (42)	21	11,818	8	9,500	2	13,042

* The Worcester Job Bank Area Includes the Fitchburg-Leominster SMSA

--TOTAL ES JOB BANK OPENINGS AND AVERAGE PAY
BY SELECTED INDUSTRY GROUP
WORCESTER MASSACHUSETTS *
MARCH, 1979

SELECTED INDUSTRY GROUP	OPENINGS AVAILABLE		OPENINGS UNFILLED		OPENINGS UNFILLED 30 DAYS	
	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY
TOTAL TRANS., COMM., ELEC., GAS, SAN. SVC (40-49)						
TRANSPORTATION SERVICES (47)	3	$ 7,367	3	$ 7,367	2	$ 6,500
COMMUNICATION (48)	8	8,879	5	9,412	2	11,050
ELECTRIC, GAS, AND SANITARY SERVICES (49)	8	10,125	3	14,000	0	0
TOTAL WHOLESALE TRADE (50-51)	127	8,148	70	8,342	39	8,925
WHOLESALE TRADE--DURABLE GOODS (50)	73	8,032	46	8,298	21	9,176
WHOLESALE TRADE--NONDURABLE GOODS (51)	54	8,305	24	8,427	18	8,631
TOTAL RETAIL TRADE (52-59)	513	7,035	244	7,181	136	7,024
BLDG. MAT., HW, GAR. SUP., MOB.HM DEAL(52)	17	7,946	9	7,672	3	7,124
GENERAL MERCHANDISE STORES (53)	136	6,503	33	6,564	19	6,390
FOOD STORES (54)	27	7,654	13	7,856	10	7,725
AUTOMOTIVE DEALERS AND GAS SVC. STATION(55)	66	7,522	34	7,619	17	8,017
APPAREL AND ACCESSORY STORES (56)	32	7,064	20	7,251	14	7,364
FURNITURE, HOME FUR. & EQUIP. STORES (57)	28	8,261	23	8,633	2	11,898
EATING AND DRINKING PLACES (58)	184	6,758	102	6,626	63	6,467
MISCELLANEOUS RETAIL (59)	23	7,725	10	8,107	8	7,638
TOTAL FINANCE, INSURANCE, AND REAL ESTATE (60-67)	77	7,429	54	7,586	28	8,406
BANKING (60)	21	6,702	16	6,345	2	6,136
CREDIT AGENCIES OTHER THAN BANKS (61)	9	6,885	7	6,877	4	6,454
SEC.&COMMOD. BRK., DEAL., EXCHG., & SVCS.(62)	1	7,280	1	7,280	0	0
INSURANCE (63)	31	8,008	22	8,580	17	9,081
INSURANCE AGENTS, BROKERS, AND SERVICE (64)	5	7,852	3	7,280	3	7,280
REAL ESTATE (65)	10	7,458	5	8,422	2	10,530
TOTAL SERVICES (70-89)	537	8,119	356	8,350	192	8,620
HOTELS, ROOMING HOUSES, CAMPS AND REL. (70)	7	8,228	1	15,000	1	15,000
PERSONAL SERVICES (72)	32	6,677	15	6,688	11	6,700
BUSINESS SERVICES (73)	131	8,156	94	8,513	53	8,571
AUTOMOTIVE REPAIR, SERVICES, & GARAGES (75)	50	8,175	34	8,057	13	8,112
MISCELLANEOUS REPAIR SERVICES (76)	14	8,402	8	8,333	1	6,240
AMUSEMENT AND RECR. SVC. EXCEPT MOVIES (79)	33	7,168	28	7,189	4	7,696
HEALTH SERVICES (80)	127	8,172	72	8,758	59	9,038
LEGAL SERVICES (81)	4	7,679	4	7,679	0	0
EDUCATIONAL SERVICES (82)	50	9,054	36	9,083	20	9,275
SOCIAL SERVICES (83)	48	8,495	37	8,821	19	8,651
MEMBERSHIP ORGANIZATIONS (86)	8	8,190	4	9,467	2	11,180
PRIVATE HOUSEHOLDS (88)	20	6,136	16	6,047	5	6,101
MISCELLANEOUS SERVICES (89)	13	10,382	7	8,742	4	7,150
TOTAL PUBLIC ADMINISTRATION (91-97)	1,413	8,224	1,200	8,124	537	8,099

* The Worcester Job Bank Area Includes the Fitchburg-Leominster SMSA

E.S. Job Bank Job Openings By Job Bank Area
By Occupational Category By Average Pay
March 1979

Occupational Category	Massachusetts	Boston-Metro	Lawrence	Springfield	Taunton	Worcester
		Average Pay				
Total All Openings	$ 8,245.00/yr	$ 8,828.00/yr	$8,152.00/yr	$8,169.00/yr	$7,194.00/yr	$7,994.00/yr
Professional, Technical, And Managerial	10,294.00/yr	12,032.00/yr	9,394.00/yr	9,863.00/yr	9,614.00/yr	9,704.00/yr
Clerical And Sales	7,537.00/yr	7,767.00/yr	7,594.00/yr	7,386.00/yr	7,331.00/yr	7,402.00/yr
Service	3.62/hr	3.66/hr	3.57/hr	3.65/hr	3.68/hr	3.44/hr
Farming, Fishery, Forestry, And Related	3.77/hr	4.30/hr	3.91/hr	3.44/hr	3.82/hr	3.78/hr
Processing	3.79/hr	3.86/hr	3.74/hr	4.27/hr	3.50/hr	3.58/hr
Machine Trades	4.09/hr	4.45/hr	3.90/hr	4.07/hr	3.92/hr	4.05/hr
Bench Work	3.42/hr	3.73/hr	3.36/hr	3.27/hr	3.22/hr	3.35/hr
Structural Work	4.32/hr	4.61/hr	4.36/hr	4.17/hr	4.05/hr	4.46/hr
Miscellaneous	3.60/hr	3.80/hr	3.53/hr	3.57/hr	3.46/hr	3.54/hr

Source: Employment And Training Administration
U.S. Department Of Labor

--TOTAL ES JOB BANK OPENINGS AND AVERAGE PAY
BY OCCUPATIONAL CATEGORY, DIVISION AND JOB TITLE
WORCESTER MASSACHUSETTS*
MARCH,1979

JOB TITLE	OPENINGS AVAILABLE		OPENINGS UNFILLED		OPENINGS UNFILLED 30 DAYS	
	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY
TOTAL, ALL OCCUPATIONS	3,982	$ 7,994	2,706	$ 8,094	1,271	$ 8,145
0 & 1 PROFESSIONAL, TECHNICAL, AND MANAGERIAL	650	9,704	531	9,434	286	9,354
003 ELECTRICAL AND ELECTRONICS ENGINEERING	12	12,569	9	12,167	3	8,847
005 CIVIL ENGINEERING	8	12,704	4	9,420	2	9,932
007 MECHANICAL ENGINEERING	8	9,190	8	9,190	5	8,861
01 ARCHITECTURE AND ENGINEERING	24	12,317	22	11,937	10	11,792
012 INDUSTRIAL ENGINEERING	12	15,708	10	15,550	5	15,900
017 DRAFTING AND RELATED WORK	7	9,247	7	9,247	1	6,032
018 SURVEYING AND CARTOGRAPHY	5	8,478	5	8,478	4	8,098
02 MATHEMATICS AND PHYSICAL SCIENCES	24	11,489	22	11,549	14	11,332
020 MATHEMATICS	11	12,506	10	12,357	5	12,677
022 CHEMISTRY	1	16,000	1	16,000	1	16,000
025 METEOROLOGY	3	12,800	3	12,800	3	12,800
029 MATHEMATICS & PHYSICAL SCIENCES, N.E.C.	9	9,307	8	9,515	5	8,172
04 LIFE SCIENCES	58	9,803	47	9,264	22	9,076
040 AGRICULTURAL SCIENCES	2	9,984	2	9,984	0	0
041 BIOLOGICAL SCIENCES	1	28,000	0	0	0	0
045 PSYCHOLOGY	55	9,466	45	9,233	22	9,076
05 SOCIAL SCIENCES	2	8,743	2	8,743	2	8,743
054 SOCIOLOGY	2	8,743	2	8,743	2	8,743
07 MEDICINE AND HEALTH	53	10,826	36	10,749	32	10,885
075 REGISTERED NURSES	31	11,771	21	11,413	20	11,371
076 THERAPISTS	6	10,309	3	10,498	2	12,253
078 MEDICAL AND DENTAL TECHNOLOGY	6	9,110	5	9,110	5	9,110

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WORCESTER MASSACHUSETTS *
MARCH,1979

JOB TITLE	OPENINGS AVAILABLE		OPENINGS UNFILLED		OPENINGS UNFILLED 30 DAYS	
	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY
079 MEDICINE AND HEALTH, N.E.C	10	$ 9,236	7	$ 10,037	5	$ 10,168
09 EDUCATION	90	8,569	73	8,131	62	8,156
090 COLLEGE AND UNIVERSITY EDUCATION	2	17,025	0	0	0	0
091 SECONDARY SCHOOL EDUCATION	9	10,037	9	10,037	6	10,374
092 PRIMARY SCHOOL AND KINDERGARTEN EDUC.	14	8,862	12	9,225	10	9,693
094 EDUCATION OF THE HANDICAPPED	4	8,892	3	8,646	2	9,069
096 ECONOMISTS AND FARM ADVISORS	1	8,736	1	8,736	0	0
097 VOCATIONAL EDUCATION N.E.C.	2	11,915	2	11,915	2	11,915
099 EDUCATION, N.E.C.	58	7,755	46	7,155	42	7,129
10 MUSEUM, LIBRARY AND ARCHIVAL SCIENCES	17	9,971	14	10,505	6	10,965
100 LIBRARIANS	12	10,987	9	12,461	3	14,490
101 ARCHIVISTS	2	8,449	2	8,449	0	0
109 MUSEUM, LIBRARY & ARCHIVAL SCIENCES, NEC	3	8,615	3	8,615	3	8,615
11 LAW AND JURISPRUDENCE	3	9,013	3	9,013	2	9,270
119 LAW AND JURISPRUDENCE, N.E.C.	3	9,013	3	9,013	2	9,270
13 WRITING	6	10,611	6	10,611	4	10,075
131 WRITERS	3	12,063	3	12,063	2	10,595
137 INTERPRETERS AND TRANSLATORS	3	9,158	3	9,158	2	9,555
14 ART	5	10,102	4	10,808	0	0
141 COMMERCIAL/GRAPHIC ARTS;DESIGNERS/ILLUST	3	11,408	2	13,472	0	0
142 ENVIRONMENTAL AND PRODUCT DESIGNERS	1	7,280	1	7,280	0	0
144 FINE ARTS: PAINTERS AND SCULPTORS	1	9,006	1	9,006	0	0
15 ENTERTAINMENT AND RECREATION	2	11,050	2	11,050	2	11,050

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WORCESTER MASSACHUSETTS *
MARCH, 1979

JOB TITLE	OPENINGS AVAILABLE		OPENINGS UNFILLED		OPENINGS UNFILLED 30 DAYS	
	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY
159 ENTERTAINMENT AND RECREATION, N.E.C.	2	$ 11,050	2	$ 11,050	2	$ 11,050
16 ADMINISTRATIVE SPECIALIZATIONS	96	10,077	77	10,007	34	10,140
160 ACCOUNTANTS AND AUDITORS	8	10,692	4	12,831	3	12,108
162 PURCHASING MANAGEMENT	3	11,266	2	9,100	2	9,100
163 SALES AND DISTRIB. MANAGEMENT	1	7,800	0	0	0	0
164 ADVERTISING MANAGEMENT	1	23,000	1	23,000	0	0
165 PUBLIC RELATIONS MANAGEMENT	2	9,485	2	9,485	1	9,630
166 PERSONNEL AND TRAINING ADMINIS.	21	10,261	16	10,218	12	10,064
168 INSP & INVEST MANAG AND PUBLIC SERVICE	13	8,918	13	8,918	0	0
169 ADMINISTRATIVE SPECIALTIES, N.E.C.	47	9,878	39	9,597	16	9,970
18 MANAGERS AND OFFICIALS, N.E.C.	106	9,329	84	9,007	32	9,007
180 AGR., FORESTRY, AND FISHING MANAGEMENT	2	6,136	2	6,136	0	0
182 CONSTRUCTION MANAGEMENT	11	8,991	8	9,040	7	9,009
183 MANUFACTURING IND. MANAGEMENT	3	11,233	3	11,233	1	12,000
184 TRANS., COMM., AND UTILITIES MANAG.	2	8,658	1	8,996	1	8,996
185 WHOLESALE AND RETAIL TRADE MANAGEMENT	5	8,372	3	8,233	2	8,450
186 FINANCE, INS., AND REAL ESTATE MANAG.	4	9,419	4	9,419	0	0
187 SERVICE INDUSTRY MANAGEMENT	58	9,158	50	9,148	14	9,441
188 PUBLIC ADMINIS. MANAGEMENT	6	8,479	5	8,286	4	8,022
189 MISC. MANGERS AND OFFICIALS N.E.C.	15	11,008	8	8,507	3	7,661
19 MISC. PROFESSIONAL, TECHNICAL, MANAGERIAL	135	8,727	117	8,565	54	8,412

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WORCESTER MASSACHUSETTS *
MARCH,1979

JOB TITLE	OPENINGS AVAILABLE		OPENINGS UNFILLED		OPENINGS UNFILLED 30 DAYS	
	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY
195 SOCIAL AND WELFARE WORK	104	$ 8,977	89	$ 8,777	33	$ 8,664
199 MISC. PROF., TECH. AND MANAG. WORK, NEC	31	7,897	28	7,899	21	8,016
2 CLERICAL AND SALES	1,029	7,402	722	7,535	289	7,509
20 STENOGRAPHY, TYPING, FILING, AND RELATED	433	7,326	341	7,332	154	7,328
201 SECRETARIES	118	7,455	106	7,365	29	7,438
202 STENOGRAPHERS	9	7,617	4	7,439	1	7,404
203 TYPISTS & TYPEWRITIN G MACHINE OPERATORS	160	7,205	137	7,208	80	7,172
205 INTERVIEWING CLERKS	7	7,019	5	7,217	3	7,428
206 FILE CLERKS	14	6,742	11	6,869	4	7,290
207 DUPLICATING-MACHINE OPERATORS & TENDERS	3	7,744	3	7,744	3	7,744
209 STENOGRAPHY,TYPING FILING & REL WRK NEC	122	7,406	75	7,558	34	7,551
21 COMPUTING AND ACCOUNT-RECORDING	209	7,226	109	7,419	58	7,287
210 BOOKKEEPERS & BOOK-KEEPING MACHINE OPS.	30	8,147	16	7,950	11	7,829
211 CASHIERS AND TELLERS	56	6,105	16	6,129	11	6,055
213 ELCTRNC/ELECTROMECHA NICAL DATA PROCESSOR	3	8,796	2	9,400	1	11,000
214 BILLING AND RATE CLERKS	6	7,357	5	7,372	2	7,020
215 PAYROLL,TIMEKEEPING & DUTY ROSTER-CLERKS	5	7,255	1	8,320	1	8,320
216 ACCOUNTING AND STATISTICAL CLERKS	28	7,436	23	7,331	9	7,387
217 ACCOUNT-RECORDING-MACH. OPERATORS, NEC	3	7,072	3	7,072	1	8,320
219 COMPUTING AND ACCOUNT RECORDING	78	7,468	43	7,613	22	7,235
22 PRODUCTION AND STOCK CLERKS	56	7,343	24	7,448	7	7,331
221 PRODUCTION CLERKS	1	9,984	1	9,984	0	0
222 SHIPPING, RECEIVING, AND STOCK CLERKS	55	7,294	23	7,332	7	7,331

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WORCESTER MASSACHUSETTS *
MARCH, 1979

JOB TITLE	OPENINGS AVAILABLE		OPENINGS UNFILLED		OPENINGS UNFILLED 30 DAYS	
	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY
23 INFORMATION AND MESSAGE DISTRIBUTION	107	$ 6,774	92	$ 6,676	18	$ 6,921
230 HAND DELIVERY AND DISTRIBUTION	2	6,791	2	6,791	1	6,032
235 TELEPHONE OPERATORS	4	7,028	3	7,360	3	7,360
236 TELEGRAPH OPERATORS	2	7,800	1	7,280	0	0
237 INFORMATION AND RECEPTION CLERKS	33	7,183	22	7,176	10	7,055
238 ACCOMODATION CLERKS & GATE TICKET AGENTS	5	6,431	4	6,479	4	6,479
239 INFO. AND MESSAGE DISTRIBUTION, N.E.C.	61	6,307	60	6,240	0	0
24 MISCELLANEOUS CLERICAL	91	7,928	82	8,105	20	6,998
241 INVESTIGATORS AND ADJUSTERS	1	9,963	1	9,963	1	9,963
243 GOVERNMENT SERVICE CLERKS, N.E.C.	54	8,796	54	8,796	0	0
245 MEDICAL SERVICE CLERKS, N.E.C.	1	8,320	0	0	0	0
249 MISCELLANEOUS CLERICAL WORK, N.E.C.	35	6,697	27	6,813	19	6,842
25 SALES OCCUPATIONS, SERVICES	14	9,982	13	10,163	11	10,378
250 SALES OCCS., REAL ESTATE & INSURANCE	8	11,475	8	11,475	8	11,475
251 SALES OCCS.,BUSINESS & FINANCIAL SERVICES	2	9,360	2	9,360	1	9,360
252 SALES OCCUPATIONS, TRANSPORT. SERVICES	2	6,500	2	6,500	2	6,500
259 SALES OCCUPATIONS, SERVICES N.E.C.	2	7,800	1	7,800	0	0
26 SALESPERSON, CONSUMABLE COMMODITIES	14	8,430	13	8,649	5	12,300
260 AGRICULTURAL AND FOOD PRODUCTS	5	9,660	4	10,800	3	12,300
261 SALESWORK,TEXTILE PROD,APPAREL & NOTIONS	9	7,727	9	7,727	2	0
27 SALESPERSONS, COMMODITIES, N.E.C.	50	8,712	36	8,796	9	9,011

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WORCESTER MASSACHUSETTS *
MARCH, 1979

JOB TITLE	OPENINGS AVAILABLE		OPENINGS UNFILLED		OPENINGS UNFILLED 30 DAYS	
	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY
270 SALES OCCS., HOME FURNISH. & APPLIANCES	22	$ 8,400	22	$ 8,400	0	$ 0
273 SALESWORK, TRANSPORT. EQUIP. PARTS & SUPP.	7	9,360	4	8,380	3	8,400
274 SALESWORK, INDUSTRIAL EQUIP. & SUPPLIES	3	9,653	2	11,100	2	11,100
275 SALESWORK, BUS/COMMERCIAL EQUIP/SUPPLIES	1	9,100	1	9,100	1	9,100
276 SALESWORK, MED/SCIENTIFIC EQUIP/SUPPLIES	2	10,500	1	0	0	0
277 SALESWORK, SPORT, HOBBY, STATIONERY, REL GD	1	0	0	0	0	0
279 SALES OCCS., MISC. COMMODITIES, N.E.C.	14	8,412	6	9,573	3	8,199
29 MISCELLANEOUS SALES OCCUPATIONS	55	6,964	12	8,521	7	8,536
290 SALES CLERKS	5	6,505	3	6,751	2	6,526
291 VENDING AND DOOR TO DOOR SELLING	3	9,100	2	9,100	2	9,100
292 ROUTE SALES AND DELIVERY	3	8,060	1	7,800	0	0
293 SOLICITORS	2	10,000	2	10,000	2	10,000
298 MERCHANDISE DISPLAYERS	1	8,500	1	8,500	1	8,500
299 MISC. SALES OCCUPATIONS, N.E.C.	41	6,598	3	9,166	0	0
3 SERVICE	566	3.44	360	3.46	187	3.39
30 DOMESTIC SERVICE	29	2.98	23	2.98	8	3.04
301 HOUSEHOLD AND RELATED WORK	23	2.97	21	2.98	8	3.04
309 DOMESTIC SERVICE OCCUPATIONS, N.E.C.	6	3.03	2	2.98	0	0
31 FOOD & BEVERAGE PREPARATION & SVC. OCCS.	187	3.26	100	3.23	60	3.17
310 HOSTS(ESSES)/STEWARDS(ESSES) EXCEPT SHIP	2	2.90	2	2.90	2	2.90
311 WAITERS/WAITRESSES	59	2.97	34	2.99	21	3.05
312 BARTENDERS	7	3.64	0	0	0	0
313 CHEFS AND COOKS, HOTELS & RESTAURANTS	39	3.52	24	3.53	14	3.47
315 MISCELLANEOUS COOKS, EXCEPT DOMESTIC	17	3.67	4	3.63	1	3.50

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WORCESTER MASSACHUSETTS *
MARCH,1979

JOB TITLE	OPENINGS AVAILABLE		OPENINGS UNFILLED		OPENINGS UNFILLED 30 DAYS	
	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY
316 MEATCUTTING,EXC. IN SLAU.AND PACK.HOUSES	3	$ 6.00	2	$ 6.00	1	$ 6.50
317 MISCELL. FOOD AND BEVERAGE PREPARATION	4	2.95	1	3.00	0	0
318 KITCHEN WORKERS, N.E.C.	56	3.01	33	3.02	21	2.91
32 LODGING AND RELATED SERVICE OCCUPATIONS	10	3.24	5	3.06	1	2.90
321 HOUSEKEEPERS,HOTELS AND INSTITUTIONS	5	3.16	2	2.90	1	2.90
323 HOUSECLEANERS,HOTELS RESTS. & REL.ESTABS.	5	3.32	3	3.17	0	0
33 BARBERING, COSMET., AND REL. SVC., OCCS.	6	2.93	4	2.90	2	2.90
331 MANICURISTS	2	3.00	0	0	0	0
332 HAIRDRESSERS AND COSMETOLOGISTS	4	2.90	4	2.90	2	2.90
35 MISC. PERSONAL SERVICE OCCUPATIONS	114	3.45	76	3.50	35	3.43
352 HOSTS(ESSES) & STEWARDS(ESSES), N.E.C.	2	3.25	1	3.12	1	3.12
354 UNLICENSED BIRTH ATTEND. & PRACT. NURSES	12	3.13	10	3.11	2	2.95
355 ATTEN.WORK,HOSPITALS MORG.AND REL.HEALT.S	57	3.42	32	3.37	26	3.40
359 MISC. PERSONAL SERVICE OCCUPATIONS, NEC	43	3.59	33	3.77	6	3.86
36 APPAREL/FURNISHINGS SERVICE OCCUPATIONS	13	3.34	4	3.36	4	3.36
361 LAUNDERING SERVICE	6	3.22	0	0	0	0
362 DRY CLEANING SERVICE	1	4.12	0	0	0	0
363 PRESSING SERVICE	4	3.39	2	3.45	2	3.45
369 APPAREL/FURNISHINGS SERVICE OCCS.,N.E.C.	2	3.26	2	3.26	2	3.26
37 PROTECTIVE SERVICE OCCUPATIONS	125	3.70	93	3.74	50	3.59
372 SEC.GRDS/CORR.OFFICERS EXC.CROSS.TENDERS	109	3.62	84	3.69	41	3.45
375 POLICE OFFICERS & DETECTIVES, PUB. SVC.	3	4.42	2	4.25	2	4.25

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WORCESTER MASSACHUSETTS*
MARCH,1979

JOB TITLE	OPENINGS AVAILABLE		OPENINGS UNFILLED		OPENINGS UNFILLED 30 DAYS	
	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY
376 POLICE AND RELATED WORK,EXC.IN FJB.SERV	2	$ 4.23	1	$ 4.46	1	$ 4.46
379 PROTECTIVE SERVICES OCCUPATIONS, N.E.C.	11	4.18	6	4.20	6	4.20
38 BUILDING AND RELATED SERVICE OCCUPATIONS	82	3.63	55	3.62	27	3.54
381 PORTERS AND CLEANERS	57	3.57	38	3.56	15	3.30
382 JANITORS	25	3.76	17	3.76	12	3.84
4 FARMING, FISHERY, FORESTRY, AND RELATED	141	3.78	127	3.76	27	4.04
40 PLANT FARMING OCCUPATIONS	137	3.78	126	3.76	26	4.05
402 VEGETABLE FARMING OCCUPATIONS	1	4.54	0	0	0	0
405 HORTICULTURAL SPECIALTY OCCUPATIONS	7	3.21	6	3.16	0	0
406 GARDENING AND GROUNDSKEEPING OCCUPATIONS	53	3.97	51	3.95	5	4.09
408 PLANT LIFE AND REL. SVC. OCCUPATIONS	76	3.69	69	3.68	21	4.04
41 ANIMAL FARMING OCCUPATIONS	3	3.56	1	3.69	1	3.69
410 DOMESTIC ANIMAL FARMING OCCUPATIONS	2	3.50	0	0	0	0
411 DOMESTIC FOWL FARMING OCCUPATIONS	1	3.69	1	3.69	1	3.69
45 FORESTRY OCCUPATIONS	1	4.59	0	0	0	0
452 FOREST CONSERVATION OCCUPATIONS	1	4.59	0	0	0	0
5 PROCESSING	140	3.58	71	3.72	29	3.88
50 PROCESSING OF METAL	16	3.60	5	4.78	4	4.79
500 ELECTROPLATING	10	3.46	1	7.21	1	7.21
501 DIP PLATING	1	3.25	0	0	0	0
503 PICKLING, CLEANING, DEGREAS.AND REL.WORK	1	4.77	1	4.77	0	0
504 HEAT TREATING	2	4.09	2	4.09	2	4.09
505 METAL SPRAYING, COATING,AND REL.WORK	1	3.00	0	0	0	0

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WORCESTER MASSACHUSETTS *
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	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY
509 METAL PROCESSING OCCUPATIONS, N.E.C.	1	$ 3.75	1	$ 3.75	1	$ 3.75
51 ORE REFINING AND FOUNDRY OCCUPATIONS	2	4.75	0	0	0	0
518 MOLDING, COREMAKING, AND RELATED WORK	2	4.75	0	0	0	0
52 PROC. FOOD, TOBACCO, AND RELATED PRODUCTS	12	3.76	9	3.71	2	3.70
524 COATING,ICING,DECORATING AND REL WORK	3	4.00	3	4.00	0	0
526 COOKING AND BAKING OCCUPATIONS, N.E.C.	5	3.68	3	3.47	2	3.70
529 TOBACCO/FOOD PROCESSING & REL PROD NEC	4	3.69	3	3.65	0	0
55 CHEM,PLASTICS,SYNTH, RUBBER,PAINT PROCESS	73	3.57	36	3.71	8	4.07
550 MIXING AND BLENDING	1	3.50	1	3.50	0	0
555 GRINDING AND CRUSHING	1	4.50	0	0	0	0
556 CASTING AND MOLDING OCCUPATIONS, N.E.C.	64	3.51	31	3.66	6	4.15
557 EXTRUDING	2	4.28	1	5.00	0	0
559 PROCESSING OF CHEMICALS & REL. PROD.,NEC	5	3.92	3	3.87	2	3.81
56 PROCESSING OF WOOD AND WOOD PRODUCTS	3	3.50	0	0	0	0
561 WOOD PRESERVING AND RELATED WORK	3	3.50	0	0	0	0
57 PROCESSING OF STONE, CLAY, GLASS & REL PR	4	3.63	3	3.58	1	4.25
575 FORMING	1	3.75	0	0	0	0
579 PROCESS.STONE,CLAY, GLASS & REL.PROD.NEC	3	3.58	3	3.58	1	4.25
58 PROCESSING LEATHER, TEXTILES, & REL. PR.	25	3.44	14	3.49	13	3.51
580 SHAPING, BLOCKING, STRETCH.AND TENTER.	1	3.25	1	3.25	0	0
581 SEPARATING,FILTERING AND DRYING	13	3.40	5	3.40	5	3.40

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MARCH,1979

JOB TITLE	OPENINGS AVAILABLE		OPENINGS UNFILLED		OPENINGS UNFILLED 30 DAYS	
	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY
582 WASHING, STEAMING AND SATURATING	4	$ 3.25	3	$ 3.25	3	$ 3.25
586 FELTING AND FULLING	4	3.50	3	3.50	3	3.50
589 LEATHER,TEXTILES & REL.PROD.PROCESS.,NEC	3	3.87	2	4.19	2	4.19
59 PROCESSING OCCUPATIONS, N.E.C.	5	3.36	4	3.38	1	3.50
590 PROCESSING PRODUCTS FROM ASST. MATERIALS	1	3.50	1	3.50	1	3.50
599 MISCELLANEOUS PROCESSING, N.E.C.	4	3.33	3	3.33	0	0
6 MACHINE TRADES	415	4.05	276	4.17	146	4.24
60 METAL MACHINING OCCUPATIONS	134	4.46	104	4.50	46	5.02
600 MACHINISTS AND RELATED OCCUPATIONS	43	4.94	32	5.03	21	4.89
601 TOOLMAKING AND RELATED WORK	13	5.89	12	6.06	8	6.06
603 ABRADING	6	4.39	2	3.50	0	0
604 TURNING	15	4.49	11	4.53	5	4.64
605 MILLING, SHAPING & PLANING	2	4.14	2	4.14	2	4.14
606 BORING	5	5.09	5	5.09	3	5.52
609 METAL MACHINING OCCUPATION, N.E.C.	50	3.65	40	3.64	7	4.52
61 METALWORKING OCCUPATION, N.E.C.	63	3.39	31	3.56	19	3.50
613 SHEET AND BAR ROLLING	3	3.95	3	3.95	0	0
615 PUNCHING AND SHEARING	15	3.38	7	3.58	5	3.41
616 FABRICATING MACHINE WORK	26	3.16	14	3.27	9	3.37
617 FORMING OCCUPATIONS, N.E.C.	12	3.34	4	3.78	3	3.50
619 MISC. METALWORKING OCCUPATIONS, N.E.C.	7	4.15	3	4.19	2	4.29
62 MECHANICS AND MACHINERY REPAIRERS	67	4.33	48	4.34	31	4.27
620 MTR. VEHICLE & ENGINEER. EQUIP.MECHANICS	54	4.10	37	4.05	22	3.80

* The Worcester Job Bank Includes Fitchburg-Leominster SMSA

--TOTAL ES JOB BANK OPENINGS AND AVERAGE PAY
BY OCCUPATIONAL CATEGORY, DIVISION AND JOB TITLE
WORCESTER MASSACHUSETTS *
MARCH,1979

JOB TITLE	OPENINGS AVAILABLE		OPENINGS UNFILLED		OPENINGS UNFILLED 30 DAYS	
	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY
625 ENGINE,POWER TRANS., AND REL.MECHANICS	9	$ 5.56	8	$ 5.56	8	$ 5.56
626 METALWORKING MACHINERY MECHANICS	1	3.74	1	3.74	0	0
629 SPECIAL INDUSTRY MACHINERY MECHANICS	3	5.00	2	5.13	1	4.50
63 MECHANICS AND MACHINERY REPAIRERS	33	4.48	28	4.57	13	4.22
630 GENERAL INDUSTRY MACHINERY MECHANICS	2	3.50	1	3.25	1	3.25
637 UTILITY SERVICE MECHANICS/REPAIRERS	5	5.75	5	5.75	1	5.76
638 MISC.MACHINE INSTALL ATION & REPAIR OCCS.	24	4.31	20	4.36	10	4.23
639 MECHANICS AND MACHIN ERY REPAIRERS, NEC	2	4.38	2	4.38	1	3.50
64 PAPERWORKING OCCUPATIONS	11	3.79	6	3.47	4	3.70
640 PAPER CUTTING, WINDING,AND REL.WORK	2	3.00	2	3.00	0	0
641 FOLDING, CREASING, SCORING AND GLUING	8	4.04	4	3.70	4	3.70
649 PAPERWORKING OCCUPATIONS, N.E.C.	1	3.40	0	0	0	0
65 PRINTING OCCUPATIONS	23	4.05	20	3.99	10	4.35
650 TYPESETTING AND COMPOSING	4	5.88	3	6.00	3	6.00
651 PRINTING PRESS WORK	16	3.71	14	3.68	6	3.74
652 PRINTING MACHINE WORK	1	3.00	1	3.00	1	3.00
653 BOOKBINDING-MACHINE OPERATORS & REL.OCCS	2	3.63	2	3.63	0	0
66 WOOD MACHINING OCCUPATIONS	24	3.87	10	3.33	5	3.30
660 CABINETMAKING	10	4.55	1	4.00	1	4.00
667 SAWING	5	3.15	4	3.19	3	3.17
669 WOOD MACHINING OCCUPATIONS, N.E.C.	9	3.50	5	3.30	1	3.00
68 TEXTILE OCCUPATIONS	38	3.52	22	3.65	16	3.38
680 CARDING, COMBING DRAWING,AND REL.WORK	8	3.29	4	3.30	3	3.25

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--TOTAL ES JOB BANK OPENINGS AND AVERAGE PAY
BY OCCUPATIONAL CATEGORY, DIVISION AND JOB TITLE
WORCESTER MASSACHUSETTS *
MARCH,1979

JOB TITLE	OPENINGS AVAILABLE		OPENINGS UNFILLED		OPENINGS UNFILLED 30 DAYS	
	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY
681 TWISTING, BEAMING, WARPING, AND REL.WORK	4	$ 3.43	3	$ 3.60	3	$ 3.60
682 SPINNING OCCUPATIONS	4	3.30	3	3.32	2	3.25
683 WEAVING AND RELATED WORK	16	3.79	10	3.98	6	3.41
686 PUNCHING, CUTTING, FORMING, AND REL.WORK	1	3.12	0	0	0	0
689 TEXTILE OCCUPATIONS, N.E.C.	5	3.37	2	3.31	2	3.31
69 MACHINE TRADES OCCUPATIONS, N.E.C.	22	3.27	7	3.06	2	3.13
690 PLASTIC,SYN,RUBBER & LEATHER WORK. OCCS.	10	3.00	4	3.00	0	0
691 FABRICATION OF INSULATION WIRE & CABLE	2	3.25	1	3.25	1	3.25
692 FABRICATION OF PROD. FROM ASSORTED MATER.	1	3.00	1	3.00	1	3.00
693 MODELMAKING, PATTERN MAKING & REL. OCCS.	1	5.92	0	0	0	0
699 MISC. MACHINE WORK OCCUPATIONS, N.E.C.	8	3.33	1	3.20	0	0
7 BENCH WORK	252	3.35	135	3.38	82	3.30
70 METAL PROD. FAB. ASSEMBLY & REPAIR, NEC	17	3.52	12	3.35	7	3.43
700 FAB.ASSEM.REPAIR OF JEWEL.SILWRE.REL.PR	1	5.00	1	5.00	1	5.00
705 FILING,GRINDING,BUF, CLEANING & POL OCCS.	4	4.38	1	4.00	1	4.00
706 METAL UNIT ASSEMBLY & ADJUSTING N.E.C.	7	3.20	5	3.25	0	0
709 FAB.ASSEM. & REPAIR OF METAL PRODS., NEC	5	3.00	5	3.00	5	3.00
71 FAB/REP SCIENT, MED, PHOTO,OPT,HOR,REL.PD	5	3.75	4	3.70	2	3.25
710 FAB.REP.INS.FOR MEAS CON. & IND.PHY.CHAR	3	3.50	3	3.50	2	3.25
713 OCCS.IN FAB & REPAIR OF OPTHALMIC GOODS	1	3.96	0	0	0	0
716 ENG. & SCIEN.INST & EQUIP.FAB & REP.,NEC	1	4.30	1	4.30	0	0
72 ASSEMBLY AND REPAIR OF ELECTRICAL EQUIP.	43	3.69	25	3.82	7	3.40

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--TOTAL ES JOB BANK OPENINGS AND AVERAGE PAY
BY OCCUPATIONAL CATEGORY, DIVISION AND JOB TITLE
WORCESTER MASSACHUSETTS *
MARCH, 1979

JOB TITLE	OPENINGS AVAILABLE		OPENINGS UNFILLED		OPENINGS UNFILLED 30 DAYS	
	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY
720 RADIO & TV RECEIVERS & PHONO. ASSEMB/REP	2	$ 4.00	1	$ 4.00	0	$ 0
721 MOTORS,GENERATORS & REL.PROD ASSEM/REP	5	4.08	1	5.00	0	0
723 OCCS. IN ELEC. APPL & FIX ASSEMB & REP	1	3.15	0	0	0	0
725 ASSEM. OF LIGHT BULB S & ELECTRONIC TUBES	1	3.80	1	3.80	0	0
726 ASSEM. & REP. OF ELE C.COMPON.& ACC., NEC	31	3.61	19	3.74	6	3.32
728 OCCS.IN FABRICATION OF ELEC.WIRE & CABLE	2	3.87	2	3.87	0	0
729 ASSEM. & REPAIR OF E LECTRICAL EQUIP.,NEC	1	3.86	1	3.86	1	3.86
73 FAB/REPAIR OF PROD. MADE FROM ASST.MATER	23	3.23	5	3.09	4	3.11
732 OCCS. IN FAB. AND RE PAIR OF SPORTING GDS	2	3.20	1	2.90	1	2.90
735 FABRICATION & REPAIR OF JEWELRY, N.E.C.	1	3.90	0	0	0	0
739 FAB/REP.OF PROD.MADE FROM ASSORT.MATS.NEC	20	3.21	4	3.14	3	3.18
74 PAINTING, DECORATING AND RELATED OCCS.	14	3.81	2	4.25	2	4.25
740 PAINTERS, BRUSH	6	3.96	0	0	0	0
741 SPRAY PAINTING	7	3.77	2	4.25	2	4.25
749 PAINTING,DECORATING AND RELATED WORK,NEC	1	3.25	0	0	0	0
75 PLASTICS,SYN.,RUBBER & REL. PROD. FAB/REP	11	3.11	9	3.16	5	2.98
750 TIRES, TUBES, TIRE TREADS FAB. & REPAIR	4	3.38	4	3.38	0	0
754 FAB.AND REP.OF MISC. PLASTICS PRODUCTS	7	2.96	5	2.98	5	2.98
76 OCCS. IN FAB/REPAIR OF WOOD PRODUCTS	61	3.19	31	3.19	24	3.23
761 LAY.OUT,CUT,CARV,SHA P,SAND, WOOD PRD,NEC	10	3.20	3	3.25	2	3.38
763 FABRICATION & REPAIR OF FURNITURE, N.E.C.	15	3.28	9	3.37	7	3.50
769 FABRICATION & REPAIR OF WOOD PRODUCTS,NEC	36	3.14	19	3.09	15	3.09

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--TOTAL ES JOB BANK OPENINGS AND AVERAGE PAY
BY OCCUPATIONAL CATEGORY, DIVISION AND JOB TITLE
WORCESTER MASSACHUSETTS *
MARCH,1979

JOB TITLE	OPENINGS AVAILABLE		OPENINGS UNFILLED		OPENINGS UNFILLED 30 DAYS	
	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY
77 FAB/REPAIR OF SAND, STONE,CLAY,GLASS,PRD	1	$ 3.50	0	$ 0	0	$ 0
775 GRIND.,FILING,POLISH FROST.,ETCH.OCCS,NEC	1	3.50	0	0	0	0
78 FAB/REP OF TEXTILE, LEATHER & REL. PROD.	76	3.22	47	3.30	31	3.33
780 UPHOLSTERING & FAB.& REP.OF MATTRESS/BEDS	8	3.59	4	3.86	4	3.86
781 LAY. OUT,MARK.,CUT. & PUNCH. OCCS., NEC	14	3.30	11	3.33	9	3.41
782 HANDSEWING, MENDING, EMBROID. & KNIT, NEC	5	3.30	2	3.30	2	3.30
783 FUR & LEATHER WORKING OCCUPATIONS	1	3.70	0	0	0	0
785 TAILORING AND DRESSMAKING	1	4.08	1	4.08	1	4.08
786 MACHINE SEWING OPERATORS, GARMENT	4	3.43	4	3.43	0	0
787 MACHINE SEWING OPERATORS, NONGARMENT	14	3.32	10	3.41	7	3.30
788 OCCS.IN FABRICATION & REPAIR OF FOOTWEAR	29	2.95	15	2.95	8	2.91
79 BENCH WORK OCCUPATIONS, N.E.C.	1	2.90	0	0	0	0
795 GLUING OCCUPATIONS, N.E.C.	1	2.90	0	0	0	0
8 STRUCTURAL WORK	325	4.46	221	4.47	114	4.35
80 OCCUPATIONS IN METAL FABRIACTION, N.E.C.	28	4.61	19	4.45	15	4.33
804 TINSMITHS,COPPERSMITHS&SHT.MTL.WORKERS	6	5.42	4	5.00	3	5.00
806 TRANS. EQUIPMENT ASSEM. AND REL. WORK	1	4.00	1	4.00	1	4.00
807 BODY WORK,TRANSPORT. EQUIPMENT	12	4.13	8	3.97	8	3.97
809 MISC. OCCS. IN METAL FABRICATING, N.E.C.	9	4.78	6	4.79	3	4.75
81 WELDERS, CUTTERS AND RELATED OCCUPATIONS	17	4.81	8	5.13	3	6.24

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--TOTAL ES JOB BANK OPENINGS AND AVERAGE PAY
BY OCCUPATIONAL CATEGORY, DIVISION AND JOB TITLE
WORCESTER MASSACHUSETTS *
MARCH,1979

JOB TITLE	OPENINGS AVAILABLE		OPENINGS UNFILLED		OPENINGS UNFILLED 30 DAYS	
	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY
810 ARC WELDERS AND CUTTERS	6	$ 5.88	3	$ 6.33	2	$ 7.00
811 GAS WELDING	1	6.50	1	6.50	0	0
812 RESISTANCE WELDERS	1	4.21	1	4.21	0	0
813 BRAZING, BRAZE WELDING & SOLDERING OCCS	4	3.25	2	3.30	0	0
819 WELDING, CUTTING AND RELATED WORK, N.E.C.	5	4.55	1	4.73	1	4.73
82 ELECTRICAL ASSEMB. INST., AND REPAIRING	28	5.84	19	6.01	8	6.21
823 ELEC.COMM.DET.SIG. EQU.ASSEM.INST.REP.	4	7.11	3	7.11	3	7.11
824 LIGHT.EQU. & BLD.WIR ASSEM.INST.REP, NEC	13	6.35	10	6.26	4	5.64
826 IND.APP.ASSEM.INST. & REP. OCCS., N.E.C.	2	4.63	0	0	0	0
827 LARGE HOUS.APP.SIM. COM.IND.EQU.ASSEM.	2	6.38	2	6.38	1	5.75
828 ELEC. & ELEC. PROD. FAB.,INSTALL.REP.NEC	3	4.57	1	0	0	0
829 INSTAL.REP.OF ELECTRICAL PRODUCTS,N.E.C.	4	3.89	3	3.85	0	0
84 PAINTING, PLASTERING WATERPT., CEMENTING	19	5.31	12	5.10	3	6.00
840 CONSTRUCTION AND MAINT. PAINTERS	4	4.10	2	4.00	1	3.00
842 PLASTERING AND RELATED WORK	8	7.11	4	7.25	2	7.50
843 WATERPROOFING AND RELATED WORK	2	3.75	1	4.00	0	0
844 CEMENT AND CONCRETE FINISHING & RELATED	2	4.10	2	4.10	0	0
845 TRANSPORTATION EQUIP PAINTING & RELATED	3	4.00	3	4.00	0	0
85 EXCAVATING,GRADING, PAVING, & REL. OCCS.	10	4.99	10	4.99	2	6.00
850 EXCAVATING, GRADING, AND RELATED WORK	5	5.40	5	5.40	2	6.00
859 EXCAVATING, GRADING PAVING &REL.OCCS.NEC	5	4.57	5	4.57	0	0
86 CONSTRUCTION OCCUPATIONS, N.E.C.	158	4.26	98	4.32	45	4.14

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--TOTAL ES JOB BANK OPENINGS AND AVERAGE PAY
BY OCCUPATIONAL CATEGORY, DIVISION AND JOB TITLE
WORCESTER MASSACHUSETTS *
MARCH,1979

JOB TITLE	OPENINGS AVAILABLE		OPENINGS UNFILLED		OPENINGS UNFILLED 30 DAYS	
	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY
860 CARPENTRY AND RELATED WORK	37	$ 4.42	26	$ 4.41	17	$ 3.95
861 BRICK/STONE MASONRY & TILE SETTERS	3	5.83	2	6.75	1	6.50
862 PLUMBERS,GAS FITTING STEAM FITTING OCCS.	8	5.58	6	5.93	3	6.00
863 ASBESTOS AND INSULATION WORK	5	3.85	4	3.91	4	3.91
865 GLAZIERS AND RELATED WORK	1	4.00	0	0	0	0
866 ROOFING AND RELATED WORK	15	3.95	3	4.00	1	4.00
869 MISCELLANEOUS CONSTRUCTION WORK, N.E.C.	89	4.10	57	4.07	19	3.95
89 STRUCTURAL WORK OCCUPATIONS, N.E.C.	65	3.88	55	3.89	38	3.85
891 STRUCTURAL MAINTENANCE OCCS., N.E.C.	4	3.90	4	3.90	2	4.30
899 MISC. STRUCTURAL WORK OCCS., N.E.C.	61	3.88	51	3.89	36	3.82
9 MISCELLANEOUS	464	3.54	263	3.49	111	3.64
90 MOTOR FREIGHT OCCUPATIONS	76	4.20	35	3.86	17	4.02
902 DUMP-TRUCK DRIVING	1	4.25	1	4.25	1	4.25
904 TRAILER-TRUCK DRIVING	12	6.94	2	6.77	1	9.04
905 HEAVY TRUCK DRIVING	45	3.75	21	3.71	12	3.71
906 LIGHT TRUCK DRIVING	18	3.49	11	3.57	3	3.50
91 TRANSPORTATION OCCUPATIONS, N.E.C.	51	3.25	27	3.28	13	3.46
913 PASSENGER TRANSPORTATION OCCUPATIONS,NEC	13	3.72	9	3.77	7	3.75
914 PUMPING AND PIPELINE TRANSPORT.	2	3.90	0	0	0	0
915 PARKING LOT & AUTO. SERVICE FACILITIES	31	3.06	17	3.07	6	3.18
919 MISC. TRANSPORTATION WORK, N.E.C.	5	3.08	1	2.90	0	0
92 PACKAGING/MATERIALS HANDLING OCCUPATIONS	315	3.39	186	3.38	71	3.45

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--TOTAL ES JOB BANK OPENINGS AND AVERAGE PAY
BY OCCUPATIONAL CATEGORY, DIVISION AND JOB TITLE
WORCESTER MASSACHUSETTS *
MARCH, 1979

JOB TITLE	OPENINGS AVAILABLE		OPENINGS UNFILLED		OPENINGS UNFILLED 30 DAYS	
	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY
920 PACKAGING OCCUPATIONS	100	$ 3.25	60	$ 3.25	30	$ 3.14
921 HOISTING AND CONVEYING OCCUPATIONS	2	3.50	1	3.50	1	3.50
922 MATERIALS MOVING AND STORING OCCS., N.E.C	55	3.46	36	3.53	18	3.72
929 PACKAGING/MATERIALS HANDLING OCCS,N.E.C.	158	3.45	89	3.41	22	3.64
95 PRODUCTION AND DIST. OF UTILITIES	13	4.31	10	4.35	6	4.53
950 STATIONARY ENGINEERING	2	5.02	2	5.02	2	5.02
955 REFUSE AND SEWAGE DISPOSAL OCCUPATIONS	11	4.18	8	4.19	4	4.29
97 GRAPHIC ART WORK OCCUPATIONS	9	3.83	5	4.40	4	4.50
970 ART WORK, BRUSH SPRAY OR PEN OCCS.	4	4.50	4	4.50	4	4.50
971 PHOTOENGRAVING OCCUPATIONS	2	3.50	1	4.00	0	0
972 LITHOGRAPHY AND RELATED WORK	1	3.00	0	0	0	0
979 GRAPHIC ART WORK OCCUPATIONS, N.E.C.	2	3.25	0	0	0	0

* The Worcester Job Bank Includes Fitchburg-Leominster SMSA

--TOTAL ES JOB BANK OPENINGS AND AVERAGE PAY
BY SELECTED INDUSTRY GROUP
WORCESTER MASSACHUSETTS*
MARCH, 1979

SELECTED INDUSTRY GROUP	OPENINGS AVAILABLE		OPENINGS UNFILLED		OPENINGS UNFILLED 30 DAYS	
	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY
TOTAL PUBLIC ADMINISTRATION (91-97)						
EXEC., LEGIS., AND GENL GOVMT, EXC FIN.(91)	7	$ 8,357	4	$ 9,426	2	$ 10,533
JUSTICE, PUBLIC ORDER, AND SAFETY (92)	20	10,207	10	9,953	3	6,448
ADMINISTRATION OF HUMAN RESOURCES PGMS.(94)	1,377	8,179	1,180	8,088	532	8,099
ADMIN. OF ENVIR. QUAL. & HOUSING PGMS. (95)	8	10,684	6	11,168	0	0
NATIONAL SECURITY AND INTERNAT. AFFAIRS(97)	1	8,050	0	0	0	0

* The Worcester Job Bank Area Includes the Fitchburg-Leominster SMSA

TECHNICAL NOTES AND EXPLANATORY MATERIAL

The area manpower, employment, and unemployment information in this Area Manpower Review was compiled by the Labor Area Research Department of the Massachusetts Division of Employment Security affiliated with the Employment and Training Administration, U.S. Department of Labor. It is based in part on survey data collected from a sample of local employers, as well as information developed in the course of the normal operations of the public employment service and unemployment insurance programs operated by the local offices in the Fitchburg-Leominster SMSA. These data are supplemented by other information from organizations and agencies which work cooperatively with the Massachusetts State Employment Security Agency to implement various manpower training, vocational education, anti-poverty, and welfare programs and community development activities.

An explanation of some of the technical terminology and the sources of data for various items discussed in the Review is given below.

1. Labor Area. A labor area is a geographical area consisting of a central city or cities and the surrounding territory in which there is a concentration of economic activity and in which workers can generally change jobs without changing their residences. Basic emphasis is on commuting patterns and the relationship between the workers' place of residence and place of work. The labor area covered by this Review is defined in the Area Manpower Profile section.

2. Employment. Employment estimates are developed principally from a sample of establishments which report regularly on their employment to this agency. These estimates are periodically compared with comprehensive data on employment obtained from tax record, which provide benchmarks for the various nonagricultural industries. Appropriate adjustments are made as needed.

3. Nonagricultural wage and salary employment refers only to employees on establishment payrolls during the sample week in each month (week including the 12th), and excludes self-employed, unpaid family workers, domestic workers, agricultural workers, and workers involved in labor-management disputes. Nonagricultural wage and salary employment figures relate to place of work of the workers and not to

their place of residence. To the extent that multiple job-holding exists during the payroll period, the payroll records may count a person more than once. In addition, the payroll data include commuters who live outside the labor area, but not persons who commute to work outside the area.

4. All other nonagricultural employment includes persons who work in nonfarm industries in the area who are not on payrolls, such as the self-employed workers, domestic workers in private households, and unpaid family workers. Estimates for this employment component are developed on a somewhat different basis than explained above.

5. Unemployment. Data on UI covered unemployment, federal civilian and unemployment for ex-servicemen are supplied by by the local unemployment offices on a weekly basis on form 3279. Claims figures are then adjusted to the SMSA and Labor Market Area as required (when boundaries of the SMSA and Labor Market Area do not coincide with DES local office boundaries). The claims figures for the week including the 19th of the month and the week including the 26th of the month are then averaged, these figures with the estimates for the month, are used in the 70-step formula described in the "Employment Security Research Methods" Handbook Series.

   The final employment and unemployment figures are then multiplied respectively by balance of state factors which are the difference (calculated separately for employment and unemployment). Between the State CPS and the Boston SMSA CPS figures divided by the difference between the state 70-step and the Boston SMSA 70-step totals. In this way individual estimates for employment and unemployment by place of residence are made to conform to the CPS estimates.

   For internal consistency the independent estimates of employment and unemployment for all SMSA's and LMA's smaller labor market areas, and cities and towns outside all Massachusetts labor market areas are compared to the state total each month. The difference between the two estimates, which generally is less than 0.5 percent of the total Massachusetts labor force, is then allocated among all of the areas for

which independent estimates are calculated, excluding Boston (a CPS area). Each area's share of the difference is distributed in proportion to the area's percentage of the state's over-all employment and unemployment totals.

6. Civilian Labor Force. Civilian labor force represents the sum of the employed (exclusive of the Armed Forces), the unemployed and persons involved in labor-management disputes. Persons directly involved in labor-management disputes are not considered either employed or unemployed.

7. Hard-to-Fill Openings and Hard-to-Place Applicants (suplementary Table D). The information on hard-to-fill openings and hard-to-place applicants summarized in the table at the end of this report is based primarily on data on job openings listed and applicants registered for work at the local employment service offices. While such openings are often reasonably representative of the kinds of occupations in demand in the area, Employment Service unfilled openings (the total of employer orders which are on file and which have not been filled as of a particular day) may understate needs in some occupations for which hiring is normally handled through other channels such as union hiring halls. Openings unfilled one month or more are generally considered hard-to-fill.

8. Applicants registered at the local employment service offices are reasonably representative of the available workers supply in most occupational categories and for the most sections of the area. These jobseekers include an estimate of all workers in the area suffering a spell of unemployment each year, as well as labor force entrants and currently employed workers seeking a job change. Persons who are not now in the labor force, but may be available for work if appropriate new job opportunities develop are not included in these estimates.

9. Placements occur when the local employment service office, which has an employer job order, refers an acceptable applicant to the employer and verifies the fact that the applicant has been hired by an employer.

SUMMARY LISTING OF OCCUPATIONAL CATEGORIES, DIVISIONS, AND GROUPS

OCCUPATIONAL CATEGORIES

0/1 Professional, technical, and managerial occupations
2 Clerical and sales occupations
3 Service occupations
4 Agricultural, fishery, forestry, and related occupations
5 Processing occupations
6 Machine trades occupations
7 Benchwork occupations
8 Structural work occupations
9 Miscellaneous occupations

TWO-DIGIT OCCUPATIONAL DIVISIONS

PROFESSIONAL, TECHNICAL, AND MANAGERIAL OCCUPATIONS

00/01 Occupations in architecture, engineering, and surveying
02 Occupations in mathematics and physical sciences
04 Occupations in life sciences
05 Occupations in social sciences
07 Occupations in medicine and health
09 Occupations in education
10 Occupations in museum, library, and archival sciences
11 Occupations in law and jurisprudence
12 Occupations in religion and theology
13 Occupations in writing
14 Occupations in art
15 Occupations in entertainment and recreation
16 Occupations in administrative specializations
18 Managers and officials, n.e.c.
19 Miscellaneous professional, technical, and managerial occupations

CLERICAL AND SALES OCCUPATIONS

20 Stenography, typing, filing, and related occupations
21 Computing and account-recording occupations
22 Production and stock clerks and related occupations
23 Information and message distribution occupations
24 Miscellaneous clerical occupations
25 Sales occupations, services
26 Sales occupations, consumable commodities
27 Sales occupations, commodities, n.e.c.
29 Miscellaneous sales occupations

SERVICE OCCUPATIONS

30 Domestic service occupations
31 Food and beverage preparation and service occupations
32 Lodging and related service occupations
33 Barbering, cosmetology, and related service occupations
34 Amusement and recreation service occupations
35 Miscellaneous personal service occupations
36 Apparel and furnishings service occupations
37 Protective service occupations
38 Building and related service occupations

AGRICULTURAL, FISHERY, FORESTRY, AND RELATED OCCUPATIONS

40 Plant farming occupations
41 Animal farming occupations
42 Miscellaneous agricultural and related occupations
44 Fishery and related occupations
45 Forestry occupations
46 Hunting, trapping, and related occupations

PROCESSING OCCUPATIONS

50 Occupations in processing of metal
51 Ore refining and foundry occupations
52 Occupations in processing of food, tobacco, and related products
53 Occupations in processing of paper and related materials
54 Occupations in processing of petroleum, coal, natural and manufactured gas, and related products
55 Occupations in processing of chemicals, plastics, synthetics, rubber, paint, and related products
56 Occupations in processing of wood and wood products
57 Occupations in processing of stone, clay, glass, and related products
58 Occupations in processing of leather, textiles, and related products
59 Processing occupations, n.e.c.

MACHINE TRADES OCCUPATIONS

60 Metal machining occupations
61 Metalworking occupations, n.e.c.
62,63 Mechanics and machinery repairers
64 Paperworking occupations
65 Printing occupations
66 Wood machining occupations
67 Occupations in machining stone, clay, glass, and related materials
68 Textile occupations
69 Machine trades occupations, n.e.c.

BENCHWORK OCCUPATIONS

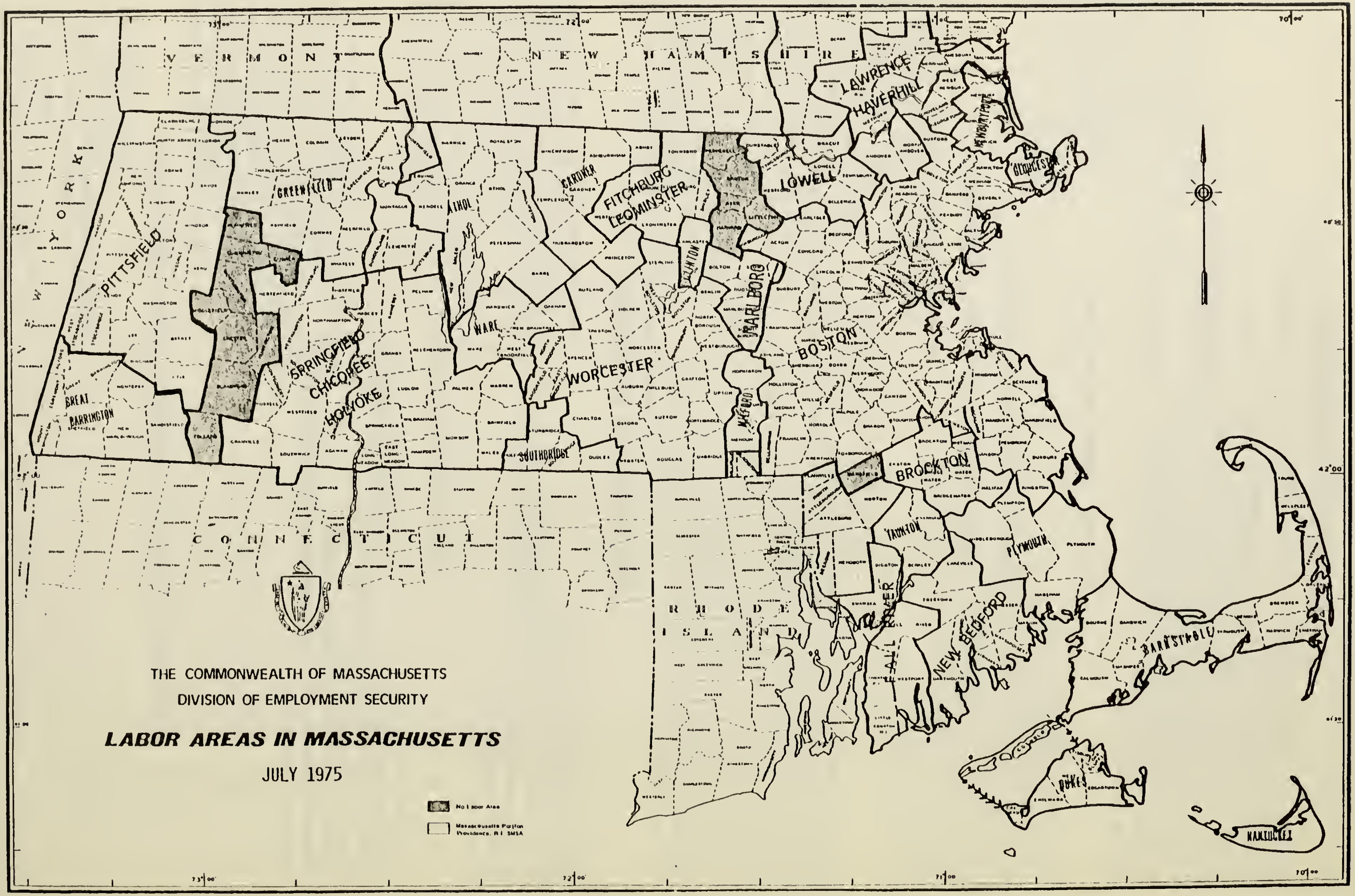
70 Occupations in fabrication, assembly, and repair of metal products, n.e.c.
71 Occupations in fabrication and repair of scientific, medical, photographic, optical, horological, and related products
72 Occupations in assembly and repair of electrical equipment
73 Occupations in fabrication and repair of products made from assorted materials
74 Painting, decorating, and related occupations
75 Occupations in fabrication and repair of plastics, synthetics, rubber, and related products
76 Occupations in fabrication and repair of wood products
77 Occupations in fabrication and repair of sand, stone, clay, and glass products
78 Occupations in fabrication and repair of textile, leather, and related products
79 Bench work occupations, n.e.c.

STRUCTURAL WORK OCCUPATIONS

80 Occupations in metal fabricating, n.e.c.
81 Welders, cutters, and related occupations
82 Electrical assembling, installing, and repairing occupations
84 Painting, plastering, waterproofing, cementing, and related occupations
85 Excavating, grading, paving, and related occupations
86 Construction occupations, n.e.c.
89 Structural work occupations, n.e.c.

MISCELLANEOUS OCCUPATIONS

90 Motor freight occupations
91 Transportation occupations, n.e.c.
92 Packaging and materials handling occupations
93 Occupations in extraction of minerals
95 Occupations in production and distribution of utilities
96 Amusement, recreation, motion picture, radio and television occupations, n.e.c.
97 Occupations in graphic art work


THE COMMONWEALTH OF MASSACHUSETTS
DIVISION OF EMPLOYMENT SECURITY
LABOR AREAS IN MASSACHUSETTS
JULY 1975
VERMONT
NEW HAMPSHIRE
NEW YORK
CONNECTICUT
RHODE ISLAND
PITTSFIELD
GREAT BARRINGTON
GREENFIELD
SPRINGFIELD
CHICOPEE
HOLYOKE
ATHOL
WARE
GARDNER
FITCHBURG LEOMINSTER
CLINTON
WORCESTER
SOUTHBRIDGE
MARLBORO
MILFORD
LOWELL
LAWRENCE
HAVERHILL
NEWBURYPORT
GLOUCESTER
BOSTON
BROCKTON
TAUNTON
FALL RIVER
NEW BEDFORD
PLYMOUTH
BARNSTABLE
DUKES
NANTUCKET

ANNUAL PLANNING INFORMATION REPORT FISCAL YEAR 1981 FITCHBURG-LEOMINSTER SMSA

LABOR AREA RESEARCH PUBLICATION

Massachusetts Division of Employment Security

job market research

ANNUAL PLANNING INFORMATION REPORT

FOR

FISCAL YEAR 1981

FITCHBURG-LEOMINSTER, MASSACHUSETTS

STANDARD METROPOLITAN STATISTICAL AREA

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Employment Security
Charles F. Hurley Building
Government Center
Boston, Massachusetts 02114

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Appendix Tables

I. Area Description - Definition of Area

The Fitchburg-Leominster SMSA comprises the central cities of Fitchburg and Leominster and the towns of Lunenburg, Shirley, Townsend, and Westminster; the population for the SMSA is about 95,000 (estimated 1981). It is located in north Central Massachusetts, a region with its own special name: Montachusetts. It is in the enviable position of being located in the lovely New England countryside and yet having access to the major urban areas of the state: Boston is 47 miles to the east; and Worcester 25 miles to the south. Put another way, the SMSA is close enough to the cities to take advantage of their culture and commerce, yet far enough away to avoid the crowding, high real estate costs and other problems of a large city.

The two central cities are spread out over a hilly 215 square miles, ranging from 400 to 1,000 feet about sea level. Many lakes and ponds add to the geographic beauty of the area and offer residents and visitors alike spectacular recreational facilities.

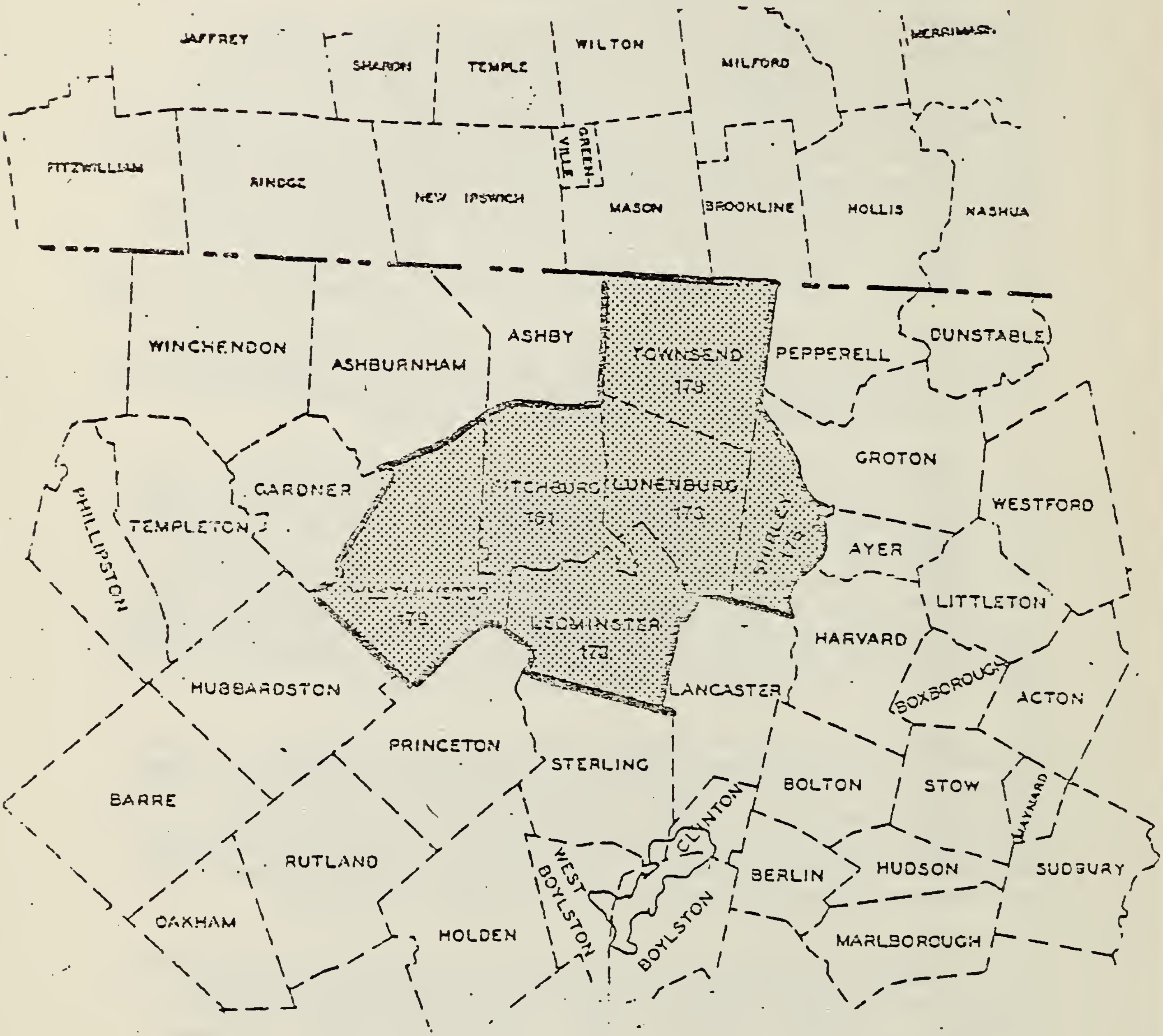
The Fitchburg-Leominster SMSA is now almost solidly hooked up to the rest of the state and its major urban markets by an excellent system of transportation. In regard to highways, routes 2, 2A, and 119 link the region with east and west. Routes 12, 13, 31 and 140 are the major connectors between the north and south. Interstate 495 skirts the eastern part of the area, and Interstate 190, projected for completion sometime in 1981, will provide an uninterrupted flow of traffic from Route 2 to Worcester, thus linking the Fitchburg-Leominster SMSA with the principal markets of the Atlantic Seaboard.

The transportation system does not stop with the highways. The area is served by two municipal airports, and two major airports -- Logan International Airport in Boston and Worcester Municipal Airport -- are only an hour's drive away. The SMSA is also served by two freight railroads, many local and interstate truck lines, and several local and interstate bus companies. In January, 1980, passenger train service was inaugurated between the local area and Boston.

The Fitchburg-Leominster area is proud of its over 300 manufacturers. It is traditionally touted for its paper and plastics industries, but it also boasts production in electronic modules, tools, textiles, machinery, castings, turbines, shoes, steel fabrication, and locks. These manufacturers supply the nation and the world with a diversity of products.

The area seeks to attract new industry to its two industrial parks. The Fitchburg Redevelopment Authority owns 100 acres at the intersection of routes 2 and 31 that have been organized into the "231" industrial park. Montachusett Industrial Park is the second site: roughly the same size, privately owned, and located on Route 2A.

FITCHBURG-LEOMINSTER SMSA

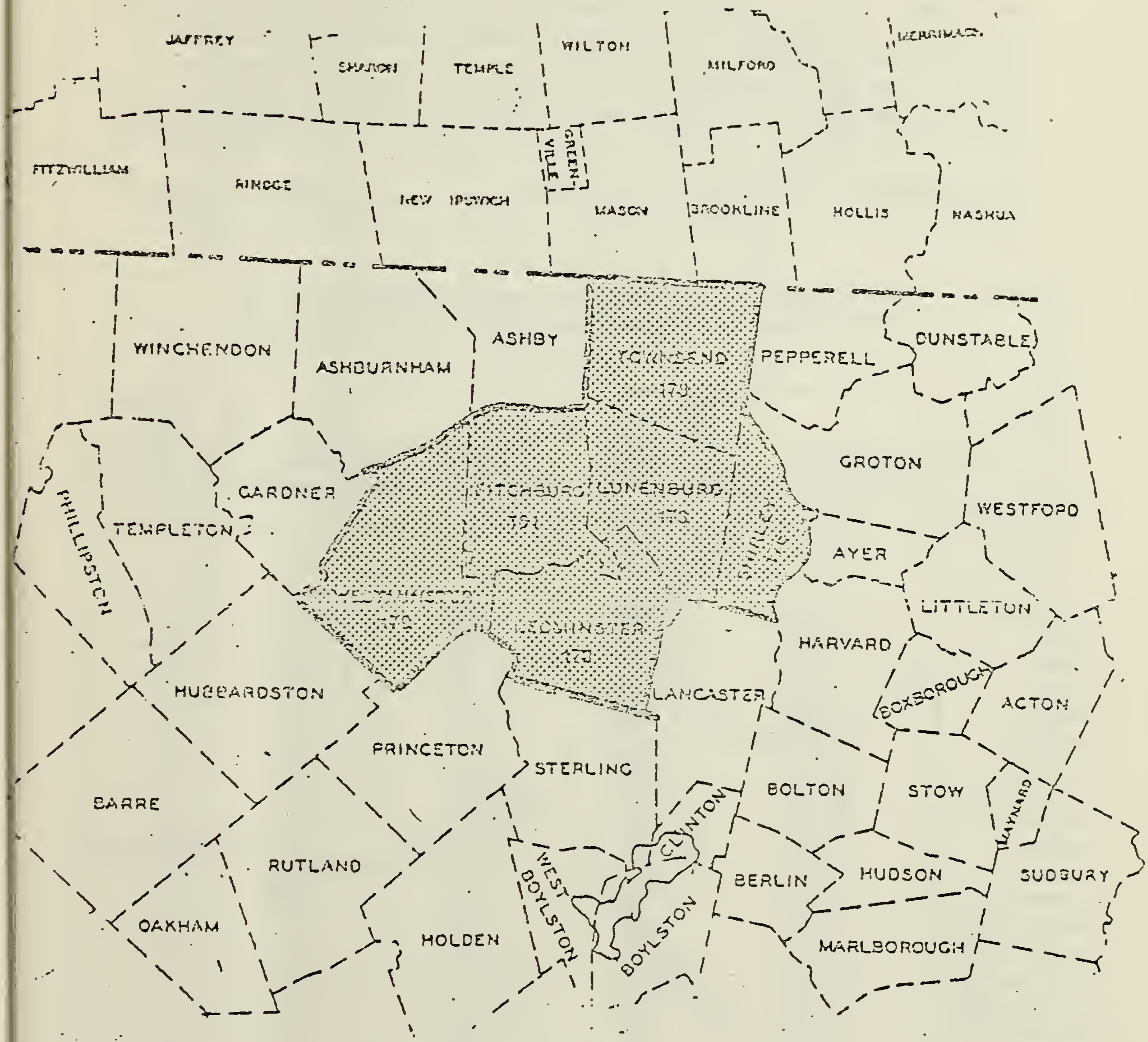


THE COMMONWEALTH OF MASSACHUSETTS
DIVISION OF EMPLOYMENT SECURITY

As Defined By
U.S. Office of Management & Budget
27 April 1973

March 197

FITCHBURG-LEOMINSTER SMSA



THE COMMONWEALTH OF MASSACHUSETTS
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The Montachusett Employment and Training Program, Inc. (formerly the Gardner CETA Consortium) is geographically defined by 26 cities and towns. Table 1 lists alphabetically these cities and towns, along with information on population estimates and labor force data for each individual city, as well as for the CETA area as a whole. The 1977 estimated population for the CETA region was 203,350, and the 1979 average annual unemployment rate for the area was 5.2 percent.

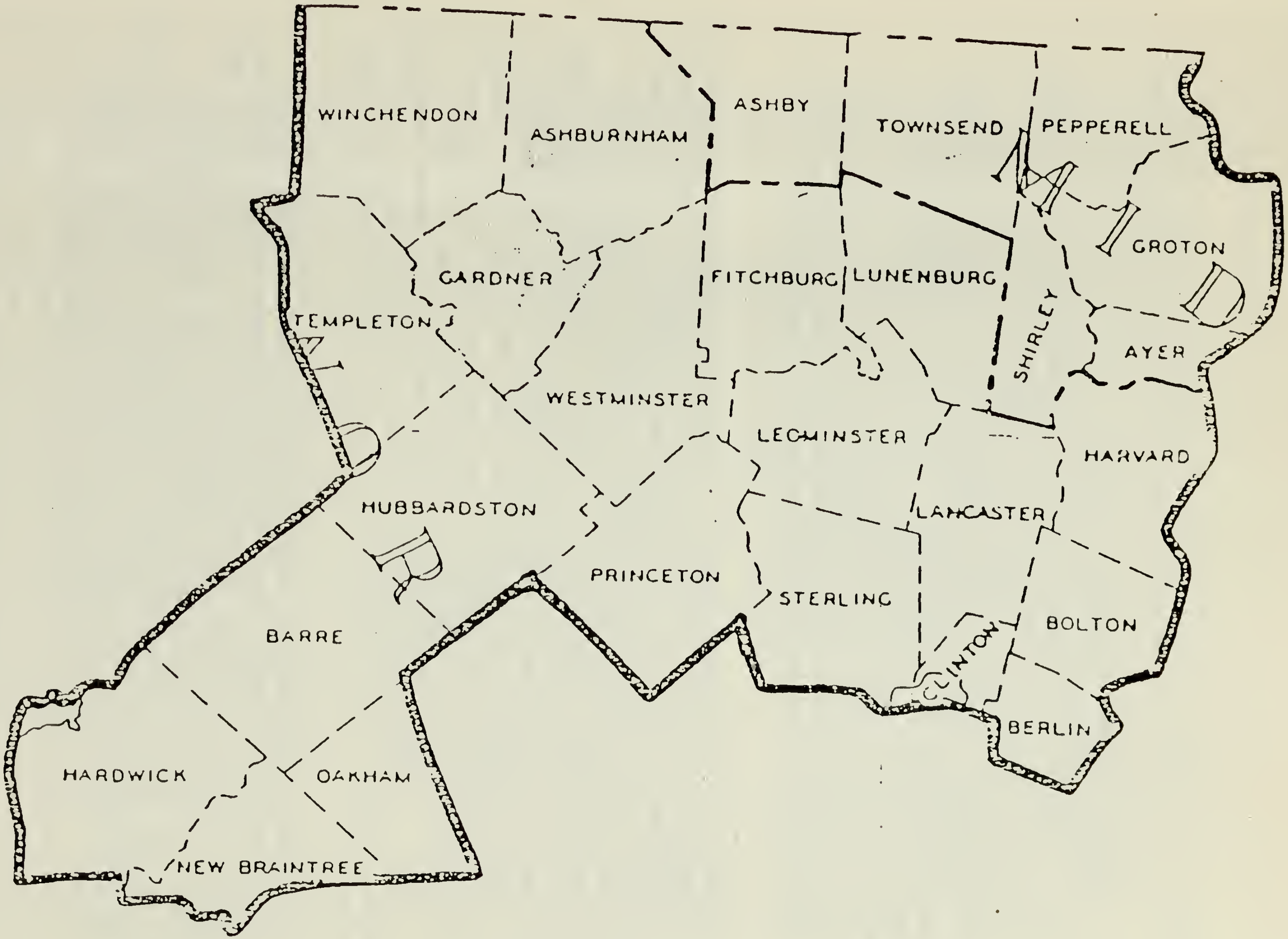
The following map indicates the location and boundaries of the CETA region.

Table 1 Montachusett Employment and Training Program, Inc.
1977 Population Estimates and 1979 Labor Force Data

Cities and Towns in Consortium	Population Estimates 1977	Annual Average Labor Force 1979	Annual Average Employment 1979	Annual Average Unemployment 1979	Annual Average Unemployment Rate 1979
TOTALS	203,350	98,336	93,217	5,119	5.2
Ashburnham	3,967	1,749	1,662	87	5.0
Ashby	2,375	1,005	940	65	6.5
Ayer	7,023	2,964	2,756	208	7.0
Barre	4,058	1,667	1,587	80	4.8
Berlin	2,363	1,118	1,068	50	4.5
Bolton	2,455	1,555	1,511	44	2.8
Clinton	12,404	6,339	5,978	361	5.7
Fitchburg*	37,380	21,880	20,700	1,180	5.4
Gardner	18,072	10,894	10,260	634	5.8
Groton	5,572	2,483	2,315	168	6.8
Hardwick	2,072	1,075	965	110	10.2
Harvard	10,217	1,881	1,732	149	7.9
Hubbardston	1,797	631	611	20	3.2
Lancaster	6,074	2,959	2,766	193	6.5
Leominster*	35,344	16,874	16,182	692	4.1
Lunenburg*	8,198	3,801	3,591	210	5.5
New Braintree	702	295	282	13	4.4
Oakham	878	304	291	13	4.3
Pepperell	7,053	2,638	2,489	149	5.6
Princeton	2,284	834	800	34	4.1
Shirley*	4,577	2,056	1,925	131	6.4
Sterling	5,043	2,271	2,197	74	3.3
Templeton	6,132	3,033	2,929	104	3.4
Townsend*	5,643	2,297	2,201	96	4.2
Westminster*	4,819	2,216	2,131	85	3.8
Winchendon	6,848	3,517	3,348	169	4.8

* Towns included in the Fitchburg-Leominster SMSA

1977 Estimated Population of Gardner Consortium= 203,350
1979 Unemployment Rate for Gardner Consortium = 5.2



GARDNER SUBGRANTEE

Commuting Patterns/Transportation

Energy conservation promises to be the key item on America's agenda for the 1980's. Our heavy dependence on foreign sources of oil has placed our country in an extremely vulnerable economic position. Confronted by this harsh fact, the United States has no choice but to develop new sources of energy and new ways of using conventional sources of energy more efficiently. Much of this energy-saving activity will focus on transportation, since it consumes a great deal of America's share of imported petroleum. This section, therefore, will discuss how commuting employees (and their employers) in the Fitchburg-Leominster area can do their share to reduce their gasoline consumption and in the process save themselves money, reduce pollution, and clear up rush-hour congestion.

The majority of commuter traffic in this country and in the Fitchburg-Leominster area consists of single-passenger vehicles. This method of commuting is expensive (with gasoline projected to be two dollars/gallon by year's end), wastes energy, and clogs the area's highways. It seems to make a great deal of sense for people who live in the same area to ride to work together. Riders in the Montachusetts area have three choices. First, they may commute by public transportation. The Regional Transportation Authority (MART) is solely responsible for transit needs and for implementing public transportation. This Authority contracts out through private carriers for local bus service between Fitchburg and Leominster and has just recently initiated services in Gardner. MART has authority over a three-member community: Fitchburg, Leominster, and Gardner. Other communities are free to become a member of the Authority at no cost; in fact, there is a good chance they would receive substantial benefits from such membership.

In addition to bus service, area residents may use another form of public transportation to commute outside the area: rail service. The commuter can buy 2 monthly passes for train service to Boston for $78 a month. This price seems quite reasonable when one considers the price of gasoline, parking fees, wear and tear on driver and car. The service has increased ridership from 2,200 the first week it opened in January, 1980, to over 3,000 per week in March. Average weekday ridership originating at stations in the Montachusett region is 179 persons. Perhaps the most astonishing fact is that train users now save between $7 and $10 million in gasoline per year.

Another form of ridersharing is the van pool. Over 45,000 commuters nationwide have switched to this method of ridersharing. Typically, one member of each van pool drives and takes care of the van -- in exchange for a free commute and limited personal use. The others split all costs (including full insurance coverage) through a low monthly fare which is easily cheaper than driving alone.

Van pools may be operated solely through company-based programs or through assistance from a Massachusetts private nonprofit corporation called Masspool, Inc. One area firm operates a company-based van-pooling program and it offers a shining example for others to follow. It leases a total of 74 vans to 1,340 employees (in a three-state region), and in doing so provides itself with punctual employees and improved employee morale and eased parking problems. The employees themselves save tremendously in terms of finances and wear and tear on their nerves. The biggest "problem" the company faces is that employee demand has outgrown the supply of vans.

The above example illustrates a company-based vanpooling program. However, as mentioned, a nonprofit corporation called Masspool Inc. administers a statewide vanpooling program. It assumes all responsibility for running the program, from recruiting the commuters to organizing drivers and rides and arranging for insurance and maintenance. If you as an employee or employer are interested in obtaining help from them in starting your vanpooling program, please contact:

Caravan for Masspool, Inc.
Room 301
150 Causeway Street
Boston, MA 02114
617-742-2655

The third form of ridersharing is the simple means of carpooling. The idea, the same as vanpooling, is that people who live and work in similar locations and are roughly on the same schedule should ride together rather than each individually. Masspool is the statewide ridersharing program that provides assistance to large companies (more than 250 employees) through site visits, computer matching assistance, and the provision of information. Masspool also assists smaller companies and communities on request. If a company desires assistance in starting up its own carpooling program, call the Masspool Program at (617) 542-4080 at the Massachusetts Department of Public Works.

Whether companies and commuters in the Fitchburg-Leominster area are willing to change their conventional commuter patterns and participate in some form of ridersharing is a question only partially answered. In the past, the answer seems to have been "no". The Montachusetts Regional Planning Commission (MRPC) conducted a study over 1975-1977 to

determine, among other things, whether area employers were interested in participating in a carpooling program. The results were very discouraging: only a very small number of companies participated in the program, despite extensive promotion through all forms of media presentation. The limited response from area employers forced the study to conclude: "....it appears that there is very little interest in carpooling in the Montachusetts Region. Apparently employees would rather pay the extra expenses of owning and operating a private automobile than adapt to a perceived lack of freedom and flexibility that carpooling might entail."

At the moment, the MRPC has no funds for ridersharing programs; its present priorities rest with highway improvements. The Masspool staff itself has not yet met with regional company officials to help set up ridersharing programs. It appears, therefore, that the initiative to start ridersharing programs must be taken by private companies. Current prices and conditions may persuade companies to adopt some type of ridersharing for their employees. A large and growing national movement of vanpooling and carpooling has already saved the nation millions of gallons of gasoline and millions of dollars in personal expenses.

The combination of good route systems, public transportation, private carriers, rail service, increased vanpooling, and increased carpooling make the Fitchburg-Leominster Standard Metropolitan Statistical Area more attractive for commuting than many metropolitan areas of comparable size throughout the country.

ASSUMPTIONS AND PROJECTIONS FOR THE ECONOMY
COMMONWEALTH OF MASSACHUSETTS
FEDERAL FISCAL YEAR 1981 (FFY '81)

The Job Market Research staff of the Division of Employment Security has the responsibility for analyzing and reporting changes in the State's employment and unemployment. Nevertheless, even with the most current data and with computer models of the national and state economies, projecting economic conditions is extremely difficult in these times of rapid changes. (At the national level, for example, projections of the FFY '81 average unemployment rate have been increased by almost two percentage points in a recent two-month period.) The economic assumptions for Massachusetts were based on data available at the beginning of June 1980.

1. Employment

Employment by industry groups has been projected for the coming fiscal year. Detailed projections are analyzed in a later section of this report. Total employment in Massachusetts is expected to range around 2,705,000 for FFY '81. This is an expected decline of 5,000 from FFY '80. Wage and salary employment projections by industry group for FFY '81 range around the levels shown below:

Industry	Employment Projected FFY 1981 in 000's
TOTAL NONAGRICULTURAL EMPLOYMENT	2,655.4
Manufacturing - Total	669.4
Durable goods	406.1
Nondurable goods	263.3
Construction	78.0
Transportation, Communications & Public Utilities	119.1
Wholesale and Retail Trade	589.2
Finance, Insurance and Real Estate	151.8
Services 1/	626.1
Government - Total	421.6
Federal	60.8
State	98.1
Local	262.8

1/ Includes part of Agriculture and Mining

2. Unemployment Rate

We expect Massachusetts to average approximately one-half to one percentage point below the national average rate. As of this writing, the Data Resources Incorporated (DRI) national forecast is for an 8.5 percent average unemployment rate during FFY '81. This would give Massachusetts an average unemployment rate of about 8 percent over the same time period.

3. Labor Turnover

The labor turnover in Massachusetts is expected to follow the 1971 trend during which new hires and quits fell 30 percent to levels below 2.0 per 100 employees. Total accessions are expected to be fewer than total separations by a ratio of 2 to 3.

4. Wages and Inflation

Total wages are expected to increase by approximately 11 percent. Purchasing power is not expected to rise by as much as wages because inflation will continue to reduce the value of the dollar. During FFY '80 inflation has risen to 13.5 percent, but is expected to be less in FFY'81 -- perhaps down to 10 percent. It is doubtful that consumers will continue purchasing at the FFY '80 rate, which is already considerably lower than FFY '79 in real terms.

5. Credit

The cost of financing current purchases is expected to remain high, but well below the FFY '80 peak which saw a prime rate of 20 percent. The mortgage rates are projected to be around 11.0-11.5 percent in FFY '81, and consumer credit in a range of 11-12 percent. All interest rates are highly sensitive to changes in U. S. Treasury or Federal Reserve Bank policies.

6. Defense Contracts

Defense contract spending, vital to the health of the Massachusetts economy, is expected to remain stable at its current levels. Massachusetts is among the top 10 states in the receipt of defense contracts with a value greater than $10,000. The nearly $3 billion awarded to the Commonwealth's firms represents over 5 percent of the total awards.

7. Energy

Because the Massachusetts industrial mix is relatively nonenergy intensive, we do not expect the upward trend in energy prices to affect Massachusetts as much as the rest of the country. During 1979, industries coped with rising energy costs through conservation, conversion, and cogeneration.

Energy and Employment

The New England Regional Commission sees the rising energy prices, particularly oil product prices, having a significant impact on the region in a number of ways:

1. Rapidly rising energy prices contribute to inflation.

2. Increased prices lead directly to increased costs of doing business and the cost of living, particularly in relation to the region's fuel mix and the already above average prices for energy experienced in New England.

3. Rising energy prices indirectly affect a person's consumption expenditure patterns by requiring that a higher percentage of income has to be used to pay for energy.

Of particular concern is the effect the cost of energy has on the regional economy. Since over 90 percent of the primary energy consumed in New England emanates from outside the region, the majority of energy expenditures flows directly out of the region draining the economy of consumption expenditures and savings which could be used to finance investments in the economy.

Potential impacts of energy costs on employment could be:

1. Increased expenditures on necessities mean people have less money to spend on consumer nondurables produced in the region, tourism or services.

2. A lower level of savings in the economy could affect the availability of funds for capital investment projects. Industries such as primary metals and fabricated metals would be impacted by a decline in orders for capital intensive machinery.

3. Older, less efficient, and energy-intensive industries such as paper and allied products, chemical and allied products, and primary metal industries may be particularly vulnerable to higher energy prices. These types of firms, particularly when located in rural areas and employing a significant percentage of a town's labor force may be most vulnerable and result in the creation of pockets of unemployment in the midst of a strong, high technology oriented economy.

4. Employment levels in industries dependent on oil and gasoline consumption or on petrochemicals would be affected. The following industries would experience energy-related decreases in employment.

A. Public Works and Housing Construction

SIC 15	General Building Contractors
SIC 16	Heavy Construction Contractors
SIC 17	Special Trade Contractors
SIC 24	Lumber and Wood Products
SIC 25	Furniture
SIC 655	Subdivision and Developers
SIC 656	Operative Builders

B. Private Use Transportation Equipment and Service

SIC 371	Motor Vehicles and Equipment
SIC 3732	Recreational Boat Building
SIC 421) SIC 423)	Trucking Services
SIC 45	Air Transportation
SIC 554	Gasoline Service Stations

C. Petrochemicals By-Products

SIC 282	Plastics and Synthetic Resins Sector
SIC 301	Tires and Inner Tubes
SIC 307	Miscellaneous Plastic Products
SIC 3861	Photographic Supplies

III. Population and Labor Force Characteristics

Table 2 highlights population changes from 1970 to 1977 for the cities and towns within the Fitchburg-Leominster SMSA. Two points stand out. One is that in the 1970's the population for the SMSA as a whole has stabilized, even dropped off a bit. It seems that the 70's was not a growth decade for the Fitchburg-Leominster SMSA. Second, where there is growth, it seems to be mainly occurring outside the city of Fitchburg.

Table 3 gives population projections by sex, age, and race to July, 1981, for the SMSA as a whole and these data similarly confirm a picture of stabilization for the Fitchburg-Leominster area. The total population projection suggests a leveling off just below the 1970 census figure.

The break out of racial groups in Table 3 tells us that the Fitchburg-Leominster SMSA is overwhelmingly white while the nonwhite population is projected to account for less than two percent of the total 1981 population. Moreover, this racial composition of the community has changed little over the past decade. Table 4 compares racial composition of the SMSA for 1981 with 1970. For both years, the nonwhite population is less than two percent of total population and although blacks and others categories swelled slightly in 1981 projected figures, these gains are by no means large enough to indicate significant changes in future racial composition of the community.

As for the future, one suspects that total population for the SMSA will increase at a rate faster than it did in the 1970's. Several developments seem to support this conjecture. First, the I-190 project is scheduled for completion in 1982. This will provide a direct route between Worcester and Fitchburg and reduce commuting time from 47 minutes to 17 minutes. Such a prospect would make Worcester an attractive commuting time from Fitchburg and may draw people to the SMSA. Second, population growth can be expected for the Fitchburg-Leominster region because its land is cheap relative to Boston and the area inside 495; many industries and people may elect to live in the Montachusetts area because of the lure of cheaper real estate. Finally, train service between Fitchburg and Boston began in January, and this, too, might give a boost to population growth. It can be argued that the service will provide a reasonable commute to Boston for those who wish to take advantage of cheaper housing by living in the Fitchburg-Leominster area.

Table 2 Population Change From 1970 to 1977 For The State, Fitchburg-Leominster SMSA, and Cities and Towns Within The SMSA

	April 1, 1970 Census	July 1, 1977 Estimates	Change 1970 to 1977 Numbers	Change 1970 to 1977 Percent
Massachusetts...........	5,689,170	5,778,374	89,204	1.6
The SMSA................	97,164	95,961	- 1,203	- 1.2
Central Cities in SMSA....................	76,282	72,724	- 3,558	- 4.7
Fitchburg City......	43,343	37,380	- 5,963	-13.8
Leominster City.....	32,939	35,344	2,405	7.3
Outside Central Cities..	20,882	23,237	2,355	11.3
Lunenberg Town.....	7,419	8,198	779	10.5
Shirley Town.......	4,909	4,577	- 332	- 6.8
Townsend Town	4,281	5,643	1,362	31.8
Westminster Town...	4,273	4,819	546	12.8

Table 3

Total Population Projection
For July 1, 1981,
By Sex, Race, and Age
Fitchburg-Leominster SMSA

Age	Male			Female		
	White	Black	Other	White	Black	Other
TOTALS	43,470	675	133	49,842	510	222
0-14	10,268	158	56	9,837	157	40
15-19	4,683	120	23	4,648	67	29
20-24	4,529	158	6	4,659	81	27
25-34	5,406	83	0	7,556	89	14
35-44	4,791	33	14	5,147	58	33
45-64	9,624	110	25	10,876	32	61
65+	4,169	13	9	7,119	26	18

TOTAL:	Population	94,852
	Female	50,574
	Black	1,185
	Other	355

Table 4 Comparision of Population Characteristics
For
1970 and 1981
Fitchburg-Leominster SMSA

Population Characteristics	1970 Census		1981 Estimates	
	Number	Percent	Number	Percent
TOTAL POPULATION	97,164	100.0	94,852	100.0
White.........	95,867	98.7	93,312	98.4
Black.........	1,003	1.0	1,185	1.2
Others*.......	294	0.3	355	0.4

* Others category includes: American Indian
Japanese
Chinese
Filipino
Hawaiian
Korean

Labor Force Composition

Table 5 summarizes data on the projected composition of the labor force for fiscal year 1981. A comparison of some of the figures will put the data in perspective. Note first that the projected unemployment rate for 1981 is up substantially from that for 1979 and preliminary figures for fiscal year 1980. A prediction of an economic recession accounts for that. A breakdown of categories for unemployment rates reveals that white males (6.0 percent) will have the lowest unemployment rate and nonwhite males (12.4 percent) will have the highest rate of the four groups, over double that of the white males.

A comparision of labor force participation rates reveals some interesting results. As of 1981, the figures project a higher rate of participation for men (77.3 percent) than for women (56.6 percent). This conforms to traditional patterns. One should note, however, that whereas LFPR for men has remained the same since 1970 (77.6 percent), the women's rate will have increased by almost 25 percent over the decade (1970 rate was 45.8 percent).

Correspondingly, women increasingly account for a larger share of the labor force. In 1970, for example, women made up only 39.6 percent of the labor force; figures for FY 1981 project their strength at 46.9 percent of the labor force. It is expected that this trend will continue in the 1980's and peak by 1990. At the moment the emphasis on the role of the working woman and the need for many families to have both heads working to meet payments are the two main forces that continue to propel the trend forward.

Table 5

POPULATION AND LABOR FORCE COMPOSITION PROJECTIONS FISCAL YEAR 1981

Fitchburg-Leominster SMSA

	Est. 16+ Population 1981	Est. Labor Force	Est. Employ.	Est. Unemploy.	Est. Unemploy. Rate	Labor Force Participation Rate
TOTAL-- 1981	72,424	47,799	44,167	3,633	7.6	66.0
White Male	32,265	24,970	23,474	1,497	6.0	77.4
16-17	1,873	1,363	1,229	134	9.8	72.8
18-19	1,873	1,401	1,298	103	7.4	74.8
20-24	4,529	3,964	3,538	426	10.7	87.5
25-34	5,407	4,939	4,632	307	6.2	91.4
35-44	4,791	4,355	4,248	107	2.5	90.9
45-64	9,624	7,629	7,301	328	4.3	79.3
65 +	4,169	1,320	1,228	92	7.0	31.7
White Female	39,076	22,147	20,082	2,065	9.3	56.7
16-17	1,859	1,659	1,418	241	14.5	89.2
18-19	1,859	1,359	1,222	137	10.1	73.1
20-24	4,659	3,201	2,851	350	10.9	68.7
25-34	7,556	5,112	4,667	445	8.7	67.6
35-44	5,147	3,808	3,492	316	8.3	74.0
45-64	10,877	6,302	5,788	514	8.2	57.9
65 +	7,119	706	644	62	8.7	9.9
Nonwhite Male	566	403	353	50	12.4	71.2
16-17	57	35	35	0	0	61.4
18-19	57	28	28	0	0	49.1
20-24	164	122	122	0	0	74.4
25-34	83	74	43	31	41.8	89.2
35-44	47	32	13	19	58.4	68.1
45-64	136	113	113	0	0	83.1
65 +	22	0	0	0	0	0
Nonwhite Female	517	279	258	21	7.5	54.0
16-17	39	25	25	0	0	64.1
18-19	39	0	0	0	0	0
20-24	108	41	41	0	0	38.0
25-34	103	81	81	0	0	78.6
35-44	91	84	63	21	25.5	92.3
45-64	93	39	39	0	0	41.9
65 +	44	9	9	0	0	20.5

IV. Training Programs

The Work Incentive Program (WIN)

The WIN Program is administered by the local Division of Employment Security and is funded primarily by the Federal Government. Its purpose is to provide training and employment to those on welfare (AFDC) and thus help them move off of welfare and into full-time, permanent employment. The Fitchburg WIN Office provides services and training to clients from the following cities and towns:

Ashby	Harvard
Ayer	Lancaster
Berlin	Leominster
Bolton	Lunenburg
Clinton	Pepperell
Fitchburg	Shirley
Groton	Sterling
Townsend	

The actual operation of the program runs like this. To begin with, all new welfare recipients must register with WIN as a condition of receiving their welfare grant. The major exemptions are:if a recipient has a child under six years old or if a recipient is determined to be medically disabled. Youth on AFDC must also register with WIN if they are 16 years old, in the home, and not in school or work.

The welfare office refers the applicant to the WIN Office for initial registration and appraisal. The WIN Office registers the applicant and then, along with a social worker from the welfare office, determines the need for supportive services and an employability plan. When services have been arranged, the welfare office certifies the registrant. At this point the registrant is usually assigned to a WIN training component or employment status. Most training usually lasts from six months to a year, and much of the effort is shouldered by CETA.

A registrant is deregistered from the WIN Program when (1) he leaves the welfare rolls for whatever reason or (2) fails to cooperate with the WIN Program. The WIN Office is required to adhere to strict guidelines in carrying out the deregistration process, and will take the final step only when it receives official notice from the welfare office.

Table 6 gives a summary of selected characteristics of those registered with the WIN Program. The data paint a profile of the typical WIN registrant as a middle-aged white woman with some high school education.

Table 6

Selected Characteristics
OF
WIN Registrants
Monthly Year to Date
Period Ending March 31, 1980
Fitchburg-Leominster SMSA

Characteristics of Registrants	Cumulative Total*	On Hand At End Of Period *
TOTAL	1,231	878
Age		
Under 20	103	58
20 - 29	292	196
30 - 34	324	235
35 - 39	242	187
40 - 54	252	190
55+	18	12
Sex		
Male	310	176
Female	921	702
Education		
0 - 7 years	86	61
8 - 11	568	396
12	453	333
Over 12	124	88
Race		
White	1,085	772
Black	37	27
Hispanic	104	74
Other	5	5

* Registrants

The following table breaks out the distribution of WIN registrants in the various service or component categories.

Table 7 Training and Employment Services (Statuses) Fitchburg WIN Office March 31, 1980

Services for WIN Registrants	Cumulative (including Carryovers)	Total on Hand at End of Period
Working Registrants	497	342
Employed Part-time	134	106
Institutional Training	1	1
OJT	9	6
Work Experience	5	3
Suspense to Employment	85	39
Suspense to Training	60	43
Other Noncomponent Activity	272	160
Unassigned	402	132

Source: ESARS for WIN, Table 32
Monthly Year to Date March 31, 1980

CETA

The Comprehensive Employment and Training Act of 1973 (CETA) was passed with the purpose of providing job training and employment opportunities for economically disadvantaged, unemployed and underemployed persons; and to ensure that training and other services lead to maximum employment opportunities. Under CETA, the primary responsibility for manpower training is on the prime sponsors, which are cities with a population of 100,000 or more, and consortiums, which are groups of smaller cities and towns.

The CETA office covering the Fitchburg-Leominster SMSA is located in Gardner. Until recently, it was called the Gardner CETA Consortium or Subgrantee. However, effective September, 1979, the office is now officially known as the Montachusett Employment and Training Program, Inc. The change from a CETA Subgrantee to a nonprofit, incorporated institution has two chief consequences. First, the city of Gardner does not assume any liability for the cost errors of a nonprofit corporation. Second, as a nonprofit corporation, the office is now eligible to solicit non-CETA funds such as funds from the U. S. Department of Education, Department of Energy, public and private foundations, and so forth. A regular CETA Subgrantee is not allowed to ask for these non-CETA monies. Since the change from subgrantee to nonprofit corporation was only recently effected, the Montachusett Employment and Training Program, Inc. has not yet begun its program of soliciting non-CETA funds. This solicitation is, however, a major item on the office's agenda for Fiscal Year 1981.

The major news concerning the CETA office is drastic budget cuts in Fiscal Year (FY) 1980 for Title VI Public Service Employees (PSE's). On January 25, 1980, about 150 PSE's lost their jobs. Some of these employees were picked up by their employers but the vast majority were required to seek new jobs on their own. Furthermore, an indefinite hiring freeze for Title VI PSE's has been in effect from May, 1980. Title VI Special Projects and Winterization Programs will still have a budget for Fiscal Year 1981 (October 1, 1980-September 30, 1981), although reduced from the previous fiscal year.

A bit of good news is that the CETA office did receive in June of 1980, $200,000 for the Title IID PSE for building rehabilitation to comply with regulations for accessability for the handicapped.

Planning estimates for the CETA office are presented in Table 7A. It is evident that Title VI will suffer the most severe cutbacks for the next fiscal year. Indeed, this has been the trend over recent years. Even as recently as Fiscal Year 1979, the grant allocation for Title VI was 4.7 million dollars. The FY 1981 allocation is just a little more than a mere ten percent of this.

The various CETA Title Programs are described in a section following Table 7A.

Table 7A Planning Estimates
For The Montachusett Employment and Training Program, Inc.
Fiscal Year 1981

	Percent Of FY 1980 Base Allocation	Base Allocation FY 1980 (in dollars)	Planning Estimates FY 1981
TOTALS		$4,793,769	4,046,747
Title IIB	100.0	1,805,570	1,805,570
Youth Employment Training Program (YETP)	100.0	461,426	461,426
Title IID	90.0	1,290,911	1,161,820
Title VI	50.0	1,235,862	617,931

Title IIB

Formerly known as Title I
Services include: Classroom training, work experience, OJT and services to participants (counseling, supportive services, etc.)

ELIGIBILITY FOR PARTICIPATION IN TITLE II B

1. United States citizen or alien who is permitted to accept permanent employment by Immigration and Naturalization Service; and

2. Economically disadvantaged; and

3. Unemployed, or
Underemployed, or
In-School Youth

Title IIC

New Programs: Upgrading and Retraining Programs designed to offer additional opportunities to those locked into low paying, low-skill, dead-end jobs.
Services include: classroom training, OJT, supportive services.

ELIGIBILITY FOR PARTICIPATION IN TITLE II C UPGRADING

1. United States citizen or alien who is permitted to accept permanent employment by Immigration and Naturalization Service; and

2. Operating at less than full skill potential; and

3. Working for at least the prior six months with the same employer in an entry level, unskilled or semi-skilled position, or a position with little or no advancement opportunity in a normal promotional line.

ELIGIBILITY FOR PARTICIPATION IN TITLE II C RETRAINING

1. United States citizen or alien who is permitted to accept permanent employment by Immigration and Naturalization Service; and

2. Have received a bona fide notice of impending layoff within the last six months; and

3. Have been determined by Prime Sponsor as having little opportunity to be reemployed in same or equivalent occupation or skill level within the labor market area.

TITLE II D PSE Formerly known as Title II-PSE
Services include: public service employment, classroom training, and services to participants (counseling, job development, etc.)

ELIGIBILITY FOR PARTICIPATION IN TITLE II D PSE

1. United States citizen or alien who is permitted to accept permanent employment by Immigration and Naturalization Service; and

2. A resident of the prime sponsor's jurisdiction; and

3. Economically disadvantaged, unemployed at time of enrollment, and unemployed during 15 of the past 20 weeks, or

   A member of a family which is receiving Public Assistance; and

4. Not have voluntarily terminated, without good cause, last full-time employment during past six months.

Title IVA Formerly known as Title III C.
Programs for youth under Youth Community Conservation and Improvement Projects (YCCIP) and Youth Employment and Training Programs (YETP) are designed to provide classroom training, OJT, work experience and services to participants.

ELIGIBILITY FOR PARTICIPATION IN YCCIP

1. United States citizen or alien who is permitted to accept permanent employment by Immigration and Naturalization Service; and

2. Aged 16 through 19 years, inclusive; and

3. Unemployed; and

4. Economically disadvantaged; and

5. Has not had previous enrollments in YCCIP exceeding 12 months.

<u>ELIGIBILITY FOR PARTICIPATION IN YETP</u>

1. United States citizen or alien who is permitted to accept permanent employment by Immigration and Naturalization Service; and

2. Aged 16 through 21 years inclusive; and

3. A member of a family with total family income at or below 85 percent of lower living standard income level; and

4. Unemployed; or
   Underemployed; or
   In School

Title IV C

Summer Youth Employment Program
Services include: work experience, remedial education, assessment, classroom training and services to participants.

<u>ELIGIBILITY FOR PARTICIPATION IN SUMMER YOUTH EMPLOYMENT PROGRAM</u>

1. United States citizen for alien who is permitted to accept permanent employment by Immigration and Naturalization Service; and

2. Economically Disadvantaged; and

3. Aged 14 through 21 years, inclusive

TITLE VI PSE

Formerly called Titles VI and VI B
Services include: public service employment, training and services to participants (counseling, job development etc.)

ELIGIBILITY FOR PARTICIPATION IN TITLE VI PSE

1. United States citizen or alien who is permitted to accept permanent employment by Immigration and Naturalization Service; and

2. Resident of the prime sponsor's jurisdiction; and

3. A member of family which has been receiving Public Assistance for ten of the last twelve weeks; or
   Unemployed at time of enrollment; and
   Unemployed at least 10 out of 12 weeks prior to enrollment; and
   Have a family income which does not exceed 100% of the lower living standard income level based on the three months prior to application.

4. Not have voluntarily terminated, without good cause, last full-time employment during past six months.

V. Employment Developments and Outlook by Industry

General Introduction

The table on actual and projected industrial employment is constructed from nonagricultural wage and salary data. These data are gathered in the ES-202 survey, which is a quarterly report of employment and wages covered under the Massachusetts and Federal unemployment insurance laws. The ES-202 is the most comprehensive employer based survey currently available. It is conducted by the Division of Employment Security and accounts for about 97 percent of private wage and salary employment.

Projections for fiscal year 1980 industrial employment show a slight drop from 1979 (Table 8). The major operating assumption here is that the current national economic slowdown will to some extent be felt in the local region. Available evidence indicates, however, that the impact will not be severe, certainly not anywhere near the severity of the 1974-1975 recession.

Total industrial employment in the region has remained very stable over the past five years; it has grown slightly, just over two percent. Last year may well have been the best year for industrial growth since the 1974-1975 recession.

According to the Report on Business Expansion in the Commonwealth of Massachusetts, the Montachusetts area in 1979 saw the expansion of 14 firms. The report includes only those companies which expanded physical plants (not those which just increased employment) and only those expansions that were substantially complete during the last half of calendar year 1979. Four Fitchburg firms increased both floor space and jobs; six Leominster firms also reported growth in facilities and a number of employees. Total plant expansion for the two central cities amounted to almost 250,000 square feet. A total of 539 jobs were created because of the new expansion.

It is generally assumed that the cornerstone of Massachusetts' healthy economy, even during the current national slump, is its high-technology industry. This may indeed be true, but it does not explain the stability and strength of the Fitchburg-Leominster economy. For instance, the Fitchburg-Leominster SMSA has less than a two percent share of the state's high-technology. Moreover, the share it does have actually decreased in employment by about 8 percent from fourth quarter 1976 to fourth quarter 1978.

Table 8 Covered Nonagricultural Wage and Salary Employment
For 1978, 1979 and For Projected FY's 1980,1981
Fitchburg-Leominster SMSA

2-Digit SIC Code	Industry	Actual		Projection	
		Fiscal Year 1978 Average	Fiscal Year 1979 Average	Fiscal Year 1980 Average	Fiscal Year 1981 Average
	NONAGRICULTURAL TOTAL......	38,695	39,346	38,705	39,525
	Manufacturing Total...............	16,305	16,976	16,470	16,960
	Durable Goods..................	6,350	7,123	6,985	7,155
33	Primary Metals................	250	294	245	290
34	Fabricated Metals#............	1,152	398	375	400
35	Machinery#....................	3,590	4,275	4,270	4,280
25	Furniture, Fixtures...........	513	464	435	460
24	Lumber........................	407	458	420	475
	All Other Durables*#..........	438	234	1,240	1,250
	Nondurable Goods................	9,955	9,853	9,485	9,805
30	Rubber & Plastics.............	4,042	3,776	3,625	3,770
26	Paper & Allied Prod...........	2,071	2,001	1,910	1,980
23	Apparel & Allied Prod.........	842	939	925	940
22	Textiles......................	522	374	350	350
27	Printing, Publishing..........	730	784	775	780
28	Chemicals.....................	760	810	790	825
	All Other Nondurables**.......	988	1,169	1,110	1,160
	Nonmanufacturing Total...........	22,390	22,370	22,235	22,565
15 - 17	Contract Construction.........	1,193	1,203	1,140	1,280
40 - 49	Trans. Pub. Utilities.......	1,275	1,303	1,300	1,310
50 - 59	Wholesale/Retail..............	8,698	8,361	8,290	8,400
60 - 69	Fin., Ins., Real Estate.......	1,160	1,219	1,215	1,225
70 - 89	Misc. Services, Mining........	5,474	5,694	5,660	5,700
	Government Total.............	4,590	4,590	4,630	4,650

29,32,36,37,38* Petroleum; Stone, Clay, Glass; Electrical Equipment; Motor Vehicle Equipment; Professional and Scientific Instruments.

31,20,39** Leather; Food; Miscellaneous Manufacturing.

Industries within this category underwent an economic recoding during Fiscal Year 1979.

Fiscal Year runs from October 1 through September 30.

One must thus turn elsewhere for an explanation of the area's stability. Much of the answer is contained in the broad base of industrial employment. Perhaps even more important is the pool of skilled labor found in the region. Many employers and companies have located in the Fitchburg-Leominster area because it offers them a trained and trainable work force. In addition to the steady labor force already employed, the area contains two vocational-technical schools that have a total enrollment of over 1,500 students covering all major trades. Finally, the location of the labor area is important. The commercial real estate is cheaper in Fitchburg-Leominster than in more urban areas, yet goods can still reach a market of over 20 million people in less than five hours. The scheduled completion of I-190 in about a year will make the location of industry in the area even more attractive. One local real estate agent for commercial property claims that one large high technology firm has decided to move to the area mainly on the assumption that I-190 will provide a conduit of employees to the area.

So, all these reasons collectively argue for future industrial growth and strength in the area. The next part of this section discusses the more immediate prospects for individual industries.

Industry Outlook by Specific Industry

Durable Goods

1. Primary Metals (SIC 33)

   The primary metals industry has grown steadily over the past four years, increasing employment by 56 percent from its 1976 level of 188 employees. The industry grew by 17 percent last year alone. As recently as the last few months, skilled workers in the industry were working overtime every week. However, primary metals traditionally is very vulnerable during recessions, and it appears that it will respond similarily during the recession of this year. Some workers have already been laid off (mostly unskilled workers). Since a comparatively moderate recession is expected, the drop in employment will be nowhere what it was during the 1974-1975 recession. The industry by early next year should recover to prior year employment levels. One can expect the strongest showing within fabricated metals to be in the production of ammunition.

2. Fabricated Metals (SIC 34)

Fabricated metals remains a solid industry in the Fitchburg-Leominster region. Although employment has slipped over recent years, the industry still has all the orders it can handle. As recently as March of this year, employers were still looking for skilled welders and assemblers; the skilled employees were working 55-60 hours a week to get the orders out. It seems that layoffs during the year will be moderate and confined to the most unskilled help. Since several companies are working on orders backed up for a year or two, current adverse conditions in the market will not have an immediate impact on the industry. Moreover, a good deal of the large assembled structures made by the industry are being sent overseas. To the extent that the recession is limited to the United States, this overseas trade will also be a plus to the industry.

3. Nonelectrical Machinery (SIC 35)

Nonelectrical machinery ....is one of the area's largest industries: it accounts for roughly a quarter of total employment in manufacturing. The current economic slowdown should have little effect on this industry. The completion time for many of the orders is often two to three years. As one employer put it: "Even if our orders right now dropped to zero, we would still have enough business from back orders to keep us going for four years." In summary, then, nonelectrical machinery in the Fitchburg-Leominster region will hold steady over the current year; there will be very little hiring or laying off. The employers hope the business will begin to pick up in the middle of 1981 which will permit them to resume hiring again.

4. Furniture, Fixtures (SIC 25)

The Furniture industry for some reason seems to do well every other year. Last year, for example, it did not fare as well as expected, whereas in 1978 it did very well. It was off again in 1977, just after a strong year in 1976. At any rate, we expect a moderate decline in business this year. During the 1974-1975 recession furniture fell off bv 15 percent. Available labor market information suggests that the drop will not be as severe during the 1981 fiscal year. Perhaps one of the reasons the industry will be able to maintain its strength is that

it learns well from experience. For example, some manufacturing firms have changed from oil-based to water-based paint. Additionally, several plants are now using their scrap material to heat buildings, and this efficient use of energy reduces costly fuel bills. And after everything is said, the fact remains that good quality, wood furniture is in high demand; more than ever, people are turning to the fashionable wood products.

5. Lumber (SIC 24)

The lumber industry has grown strongly over the past five years. Last year's employment was up over 100 percent from the 1975 level of 206, and the industry employed more people than at any time in its regional history. With the onset this year of a national recession, however, it looks as if the lumber industry will drop slightly; it is tied too much into the declining construction industry, which now is very quiet. Nevertheless, the increasing demand for its raw material, combined with the need for future construction in the Fitchburg-Leominster SMSA, will lift employment levels in 1981 for the industry back up to, or above, the 1979 mark.

6. All Other Durables (SIC's 29,32,36,37,38)

All other durables includes Petroleum; stone, clay, and glass; electrical machinery, motor vehicle equipment; and professional and scientific instruments. Until 1979, petroleum and electrical machinery made up almost 75 percent of other durables. Both of these industries have grown steadily over the past five years, and would be expected to do reasonably well during a recessionary year. However, as of 1979, an economic recoding put one of the areas largest employers in the Professional and Scientific Instruments industry. Many of its products are related to leisure activity and its employment could be hurt seriously by a decrease in consumer demand for thest items during recessions. Its strength will lie in its export market and in military contracts. As a whole, the other durables should stay about even during Fiscal 1981.

Nondurable Goods

1. Rubber and Plastics (SIC 30)

The plastics industry has traditionally been touted as the economic backbone of the Fitchburg-Leominster area. Indeed, it is only one of two local industries to share over five percent of the total state employment; its share usually runs about 14 percent. Moreover, the plastics industry employs a full 25 percent of those in manufacturing for the Fitchburg-Leominster region.

Unfortunately, though plastics is one of the region's largest employers, it is also one of the most vulnerable to business cycles. The industry took a real beating in the 1974-1975 recession, and recent indications show that some plastic manufacturers have started to lay off. One firm in particular has 50 percent of its regular work force laid off. Several circumstances conspire to make this a particularly recession-prone industry. First, many of its products are used in manufacture of automobiles, housing construction, and toys -- all of which suffer from decreased consumer demand during recessions. The automobile industry in particular is slumping now and this does not portend well for plastics. Also, plastics are synthesized from petrochemicals. To the extend that the price of oil rises, the polymers and plastics used as raw materials by the local plastics firms will escalate sharply in price. All these things combined will take their toll on the plastics industry in fiscal year '80 and the beginning of 1981.

2. Paper, Allied Products (SIC 26)

Along with plastics, the paper industry is the only local industry to share over five percent of the total state employment (roughly 7 percent). And like the plastics industry, paper is traditionally very vulnerable during recessions. Employment in the local paper industry dropped off by nearly 25 percent during the last recession. The outlook for this recessionary year is not as dismal, mainly because the recession is not projected to be as severe as the 1974-1975 one. However, one company has laid off some of its maintenance technicians, and others complain that orders just aren't there. At one manufacturer, one out of the four machines is running five days per week, and the other three are running six days. One must bear in mind that in the paper industry it is common to have paper machines running seven days a week.

Papermills located in the Fitchburg-Leominster area have their own specific problems that many national competitors don't face. Most importantly, they do not have their own pulp mills; the raw materials are not located near the mill. Therefore, companies must bring in a product that has been rising prohibitively in price. An increase of 50 dollars a ton is expected this month. The cost of transportation, which is energy-intensive, increases the cost of doing business.

The industry in general uses a great deal of energy in making its product, and the rising cost of energy will only aggravate its current problems. Employers maintain that the real pinch was already felt back in the fall of 1979; and it appears that it will be felt for the rest of the 1980 fiscal year and into 1981 as well. The processed and finished paper subsector will be one of the few pockets of strength for the industry.

3. Apparel, Allied Products (SIC 23)

The apparel industry has lost about 30 percent of its employees over the decade. In this area it has been viewed as a dying industry. Yet figures show that it has posted slight gains in employment in both 1978 and 1979. Many companies still contract out their stitching in New Hampshire, where union activity is weak. A moderate decline in employment is projected for fiscal year 1980. Business should improve in fiscal 1981, but will never approach the employment levels reached in the early 1970's.

4. Textiles (SIC 22)

The textile industry was declining gradually since 1976; then in 1978, Fitchburg Yarn closed its plant and 300 employees lost jobs. It seems likely that the industry will not regain its previous strength. Foreign competition, especially from Asian countries, damages this industry. Intensive energy use by this industry is also a problem. Nevertheless, production is currently up a bit and it appears that the industry will suffer light losses in employment over the fiscal year 1981. After that, the employment should level off and stabilize.

5. Printing and Publishing (SIC 27)

The printing industry has enjoyed a strong, steady growth over the past decade. Its employment has risen about 160 percent from the 1970 level of 301. It even grew right through the 1974-1975 recession. Growth has leveled off over the past four years and most recent indicators suggest it will remain that way or even drop off some. Increased automation made possible by word processing and computerized graphics technology may mean a loss of jobs or a change in the occupational profile of the industry. And though there is always a demand for the printed word, the current economic downturn will mean that some of the orders for the more non-essential printed matter will fall off. Slight decline is projected over fiscal year 1981.

6. Chemicals (SIC 28)

Employment in the chemical industry has been stable for the past three years. It may experience a slight decline in employment during the current economic slump, but major employers feel that they will not have to cut back drastically. They see fiscal year 1981 as one with very few people laid off or hired. Orders are down only slightly from a year ago. An important fact about the chemical companies in this area is that few of their raw materials come from oil, and they have not been hurt nearly as badly as other chemical companies dependent on this increasingly expensive commodity. As one company official summed up the outlook for fiscal 1981: "We expect a quiet year".

7. All Other Nondurables (SIC's 20,31,39)

The food industry and leather industry are the major components of other nondurables. The employment level in food industry has been unwaveringly steady. Over the last four years, the annual average employment has crept from 149 to 153. The reason for the stability, crudely put, is that there is a fairly constant demand for food products.

The leather industries, particularly those that manufacture shoes, are struggling a bit this year. This industry faces stiff competition from the inexpensive foreign imports. About 50 percent of the American shoe market is made of imports. It has responded by concentrating on putting out a quality product, and this seems to be competing successfully with foreign products. At the moment, the industry is smarting from a loss in its winter line of insulated boots; orders were way down in this product because of the mild winter. The hiking boots are selling the best at this time. Another pocket of strength lies in the manufacture of athletic running shoes. Nevertheless, the industry as a whole is facing severe competition and reduced consumer demand. Some companies are doing everything possible to forestall future layoffs and shortened work weeks.

Nonmanufacturing

1. Contract Construction (SIC's 15-17)

Contract construction typically is very hard hit by the decline in building that accompanies recession. In the 1974-1975 recession, for example, local construction employment dropped 25 percent. Construction projects in the area will be quiet for a few quarters, but nothing like the decrease in activity during 1974-1975. For one, the economic slump is predicted not to be as severe. For another, I-190 should create construction jobs. Finally, area developers expect strong commercial growth over the next few years. One large high technology firm has already bought land around Route 2 and I-190 area, and this plant alone conservatively estimates 5,000 jobs over the next few years. Given all these conditions, the construction industry, should be able to recover quickly from the current slump and carry momentum into the next several years.

2. Transportation, Public Utilities (SIC 40-49)

Transportation and Utilities have increased employment by nearly 50 percent over the decade to reach a current level of around 1,300. In January a commuter train was inaugurated between the Montachusetts region and Boston. This major addition to the public transportation system of the area confirms the increasing commitment the officials and public are willing to make to public transportation. If not more convenient, it will soon be cheaper for people to use public transportation than to travel in their own car. The industry should, therefore, expect to see moderate but steady gains in employment over the next several years. The immediate economic slowdown should have little impact on employment.

3. Wholesale/Retail Trade (SIC 50-59)

Employment in area trades will fall off slightly during the current economic slump. Like most industries and businesses, the trades have already begun to feel the crunch. As an example, a few weeks ago, the washer, dryer, and refrigeration department of a large retail store had only one sale for the entire day. Most retailers are absorbing the impact of the economic slump by hiring fewer career employees and more and more part-time employees. One major store had 60 percent of its payroll on full-time in 1973-1974. Now only 25 percent are working full-time. What one looks for then are not so much massive layoffs but rather replacing full-time help with part-time help. Local retailers continue to push for more sales on credit, and hope to get customers into the store that way. They are also hoping the completion of I-190 in about a year's time will be a boost to their business. They need all of this after going through a slow winter. Most retailers witnessed a year-to-date decrease in sales of 3.5 percent and have set a modest goal for 1980 of even sales. As one personnel director put it: "It is going to be hard, there is no doubt about it."

4. <u>Finance, Insurance, Real Estate (SIC 60-69)</u>

The banking business, contrary to what many businessmen may feel, does not welcome an economic slump. Savings banks have not done well over the past two quarters. Both deposits and assets are down substantially from Fiscal Year 1979. Home mortgages, car loans, and home improvement loans have all fallen off. The number of saving deposits have dwindled, primarily for two reasons: a) People simply do not have the money to put into savings. Or,b)they are taking money out of regular savings and putting it in six-month certificates, which means the bank has to pay out much higher savings interest. In any case, savings banks are feeling the pinch of the economic slow-down. Several banking officials feel "that things are starting to improve". They point to no solid indicators but base their assessment more on what one banker called a gut feeling.

It seems that commercial banks are not experiencing the same difficulties as savings and loan banks. They are able to go to the larger businesses, who still have money. Furthermore,commercial banks pay no interest on checking accounts; savings banks do.

Real estate, like banking, is a mixed bag. Companies that deal with commercial properties are enjoying a record year. According to the head of one real estate firm, commercial brokerage does well during recessions. One of the reasons is that cash poor companies must liquidate and cash rich companies then deal for their properties. They can often pick up some real bargains. All business now is being transacted with those businesses who have a lot of cash on hand.

The commercial developers see years of prosperity ahead as well. They are convinced that the completion of I-190 and a good regional labor market will draw industry to the area. In fact, one real estate agent claims that these considerations have already influenced one very large firm to build in the area.

Private housing development, on the other hand, is not doing as well as commercial development. The money isn't there as it is in commercial development and high interest rates for home mortgages may keep it that way throughout most of the year. During times of economic instability, individuals may be hestant to commit themselves to major long-term mortgage payment.

5. Miscellaneous Services and Mining (SIC 70-89)

This is a general catch-all category of services. Employment for miscellaneous services as a whole has risen almost 25 percent over the last five years. The health and educational services are the most important subsector of this category. Neither of these industries is hurt very much by economic slumps, and thus employment will remain stable throughout the year. Aside from the economic slump, education has potential problems maintaining employment levels because of declining student enrollment. Current predictions see little increase in education employment until the late 1980's.

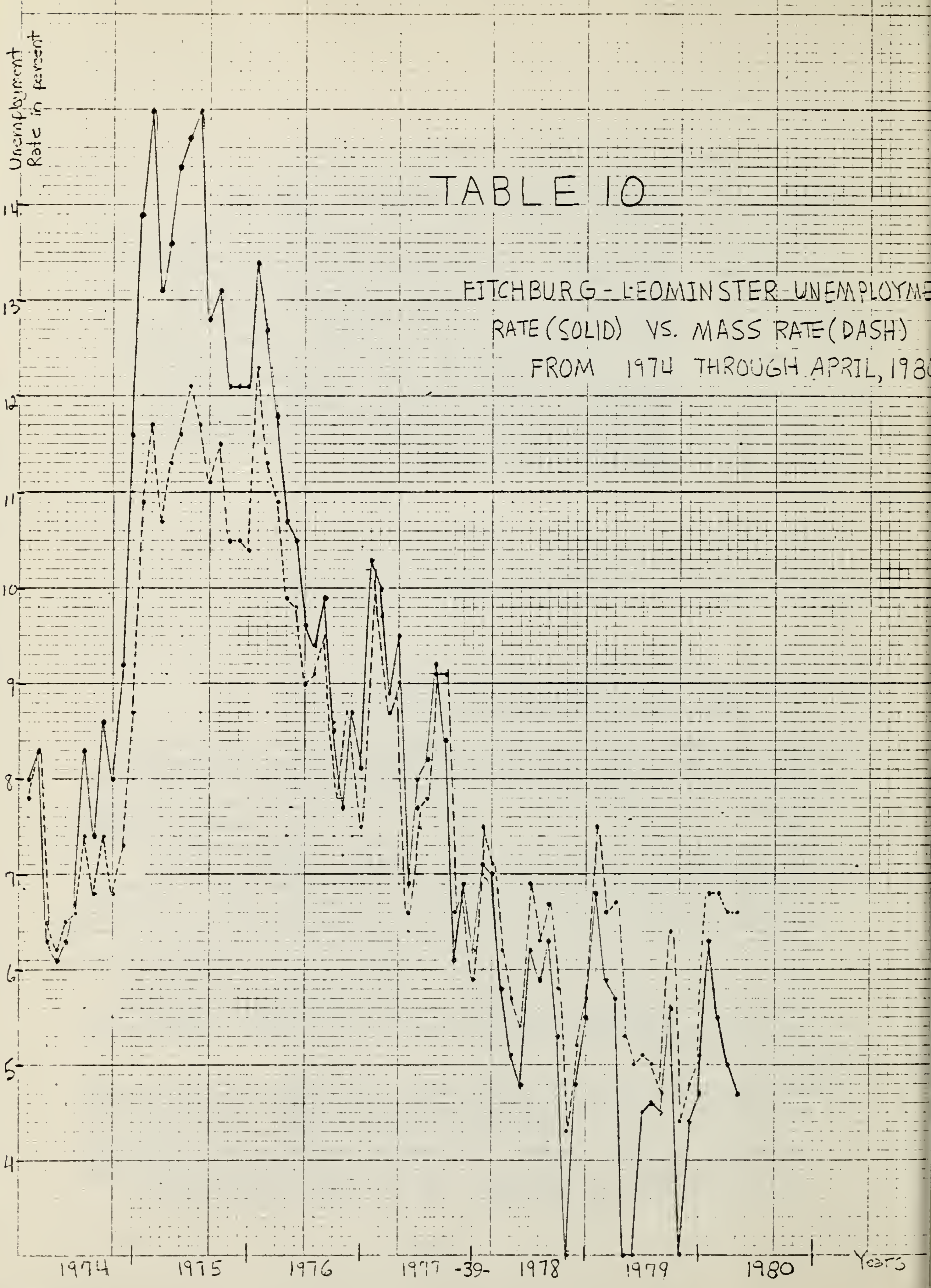
VI. Recent Unemployment Trends and Outlook

Table 9 compares annual average unemployment rates for the nation, the state, and the local area from 1974 to 1979. The area suffered its highest rate of unemployment of the decade in 1975 during the 1974-1975 recession, when the number of unemployed in some months went over 7,000. Since the mid-decade recession, the rate has declined steadily, reaching the decade low of 4.9 percent in 1979. For the first four months of 1980, the unemployment rate has averaged 5.4 percent. Based on current evidence, it appears that the local rate will not come close to rivaling the high rates the area suffered in the 1974-1975 recession. The best estimate is that the rate will peak sometime before the end of the calendar year 1980, probably at no higher than seven percent. The section on population and labor force characteristics projected an unemployment rate for fiscal year 1981 at 7.6 percent. This projection was, however, based on information now over six months old, and it seems clear that the latest data suggest a more moderate rise in the rate, probably near to seven percent.

The comparative picture of unemployment for the Fitchburg-Leominster LMA has improved in the last few years of the past decade. During the last recession, the local area fared worse than the state and far worse than the nation. By 1978, however, the Fitchburg-Leominster annual rate was about a full half of a percentage point lower than the comparable figure for both the nationand the state. And by calendar year 1979, the

TABLE 10

FITCHBURG-LEOMINSTER UNEMPLOYMENT RATE (SOLID) VS. MASS RATE (DASH) FROM 1974 THROUGH APRIL, 1980



area's rate was nearly one percentage point lower than the nation's and six-tenths of a point below the state's. See Table 10 for a graphic comparison of the state and local unemployment rates over the last half decade.

Available evidence implies that during the current economic slowdown the local region will hold its own with the state and do much better than the nation. Much of the national slowdown can be attributed to the slumping automobile industry and the devastated housing market. Fortunately, the local economy is not heavily dependent on either of these two industries; and even though the local economy is indirectly connected to the nation's because of national marketing of its products, it is not directly dependent on the ailing industries. Thus, what one can expect is a soft local economy throughout calendar year 1980, but one that certainly will be much more solid than the nation's.

The section on employment outlook by industry discusses the reasons for the stability of the area's economy over the past five years. See the appendix for the Massachusetts and national unemployment rates from 1970-1979, by month and annual averages.

Table 9 National, State, and Local Annual Average Unadjusted Unemployment Rates 1974 - 1979

Annual Averages	National Unemployment Rate (in Percent)	Massachusetts Unemployment Rate	Fitchburg-Leominster Unemployment Rate
1974	5.6	7.2	7.9
1975	8.5	11.2	13.5
1976	7.7	9.5	10.1
1977	7.0	8.1	8.2
1978	6.0	6.1	5.6
1979	5.8	5.5	4.9

Table 11 Population and Labor Force Composition Projections
Fiscal Year 1981
Fitchburg-Leominster SMSA

	Estimated Population 1981	Estimated Labor Force	Estimated Employment	Estimated Unemployment	Estimated Unemployment Rate	Labor Force Participation Rate
Total Population 16 and Over	72,424	47,799	44,167	3,633	7.6	66.0
White Male 16 and Over	32,265	24,970	23,474	1,497	6.0	77.4
White Female 16 and Over	39,076	22,147	20,082	2,065	9.3	56.7
Nonwhite Male 16 and Over	566	403	353	50	12.4	71.2
Nonwhite Female 16 and Over	517	279	258	21	7.5	54.0

Table 12 Job Applicants Available
and
Job Placements
For Demographic Segments of the Population
Fitchburg-Leominster SMSA
Fiscal Year Ending April 30, 1980

Demographic Segment Of The Population	Applicants Active During Fiscal Year	Number Placed	Percent Of Applicants Placed
TOTAL	6,011	841	14.0
Female	3,037	351	11.6
Economically Disadvantaged	1,634	100	6.1
Minority Groups	517	75	14.5
Black	218	33	15.1
Other	30	5	16.7
Hispanic	269	37	13.8
Handicapped	313	38	12.1
Veterans	1,055	179	17.0
Vietnam Era	455	87	19.1
Disabled	65	11	16.9
Under 22	1,321	246	18.6
45 and Older	881	106	12.0

Source: ESARS, Table 91, Year to Date Summary of Service to Individuals, For Period Ending April 30, 1980.

VII. Estimate of Individuals in Need of Manpower Services

There are a number of ways of getting at an estimate of those individuals who will require manpower services. One way is to examine those segments of the population which have the highest unemployment rates, because presumably these people will require the most services in order to prepare them for area jobs. Table 11 provides this information.

Note several things. First, the categories of the population with the highest rates of estimated unemployment are 1) nonwhite males and 2) white females. The unemployment rate for nonwhite males is double that of white males. This, then, is one segment of the population clearly in need of services and training. Fortunately, this segment accounts for less than one percent of the labor force. This comparatively small number should make it easier for local employment personnel to identify common needs and problems and provide the appropriate training.

The estimated unemployment for white females is almost 10 percent, and this group, too, will likely require extensive manpower services to get its rate down to levels comparable with the white males and nonwhite females. Unlike the nonwhite males segment, white females make up a large portion of the total labor force, nearly 50 percent, and will thus require a greater commitment of services and training.

Another way of determining area needs for manpower services is to look at the subcategories of the population and see how they compare in terms of the percent of applicants that are placed in jobs. The assumption here is that groups with lower placement rates will require more services than groups with better placement rates. Table 12 breaks out this data. Not surprisingly, the economically disadvantaged have the lowest placement rate. Women,older workers,and the handicapped follow in that order as the groups having difficulty in being placed in jobs. Minorities and veterans achieved the best placement rates, and this indicates that these two groups, who have long been considered as deserving extra assistance in getting jobs, are now receiving these services.

In sum, then, the data from the two tables suggest that women, the economically disadvantaged, and the handicapped are the segments of the population most in need of additional manpower services. Women account for almost 50 percent of the labor force, while the disadvantaged and handicapped account for less than five percent. Veterans and minorities seem to be less in need of services than they used to, but the evidence here is more shaky. One suspects they will still require large amounts of assistance, much of which must go beyond more technical assistance and skills training.

VIII. Employment and Outlook by Occupation

The current employment of and outlook for occupations in the Fitchburg-Leominster Labor Area can be assessed in a number of ways. One can begin to get a rough idea of what is available by looking at the group of hard-to-fill occupations listed with the local Division of Employment Security. Two tables are relevant here. Table 13 gives the overall picture; it lists unfilled job openings for the nine major occupational categories used by the Dictionary of Occupational Titles (DOT) handbook. Table 14 lists specific vocational jobs that had at least 30 openings for the 1979 fiscal year; they are ranked in order of being most difficult to fill, as measured by percent unfilled of total openings. For both tables, one presumes that those occupations that have a high percent of unfilled openings will be those most in demand in the area. But experience tells us to interpret the data in these two tables cautiously. The data may be limited in their general application to occupational outlook and demand. For one, jobs with federal contracts require mandatory listing with the employment office; thus, one does not know for sure whether the job is really in demand or listed merely because it carries a federal contract. Second, not all private employers list their job openings with the Division of Employment Security; and those that do, tend to list jobs that they need on short notice, which often turn out to be clerical or low skilled. The point here is that the job listings may well skew the sample of occupational demand. Finally, we do not always know how many of the unfilled jobs are actually unfilled or why they go unfilled. In short, the data from Tables 13 and 14 offer only a crude index of occupational employment and outlook. We must turn to other indicators for a more complete picture.

Interviews with vocational school and community college placement officers revealed a good deal of first-hand information about occupational employment in the Fitchburg-Leominster Labor Market Area.

Guidance personnel at Leominster Trade High mentioned that machinists, auto body repairers, auto mechanics, computer technicians, welders, and those in their electronics/electrical courses were all in strong demand and had favorable occupational outlooks. The only trade in which they found it difficult to place graduates was drafting.

The supervisor of cooperative education and job placement at the Montachusett Regional Vocational-Technical School maintained that there was a good occupational outlook for almost all trades offered there with the exception of commercial art. He singled out those with the most promising prospects as: machinists, auto mechanics, electricians, electronics workers, welders, food service workers, and cabinet makers. Those occupations most in demand for co-op placements were machinists, auto mechanics, electricians and those in metal fabrication. Monty Tech's post-graduate programs in health are in good demand, although there is concern that the market for medical and dental assistants may become flooded.

Table 13 Unfilled Job Openings
By
Occupational Category
For
Fitchburg-Leominster
From October 1, 1979 to April 4, 1980

DOT Code	Major Occupational Category	Number Of Openings Received	Total Number Of Unfilled Openings	Unfilled as Percent of Total Received
	TOTAL	1,339	435	32.5
0-1	Professional, Technical, and Managerial	101	57	56.4
2	Clerical and Sales	306	71	23.2
3	Services	178	78	43.8
4	Farming, Fishing and Forestry	6	2	33.3
5	Processing	195	42	21.5
6	Machine Trades	78	29	37.2
7	Bench Work	102	21	20.6
8	Structural Work	151	87	57.6
9	Miscellaneous	220	47	21.4

Source: Division of Employment Security, Employment Service Automated Reporting System (ESARS).
Table 96, Year-to-date, April 30, 1980.

Table 14 Rank Order of Vocational-Technical Jobs
By
Difficulty of Filling
Fitchburg-Leominister SMSA

DOT Code	Occupational Title	Total Openings	Total Unfilled Openings	Unfilled As Percent Of Total	Rank Order By Percent Unfilled
828	Fabrication, installation, and repair of electronic devices	53	50	94.3	1
899	Miscellaneous structural work	47	27	57.4	2
211	Cashiers and tellers	40	16	40.0	3
840	Painters	32	12	37.5	4
556	Casting and molding	239	65	27.2	5
726	Repair and assembly of electronic components	37	10	27.0	6
313	Chefs and cooks	33	7	21.2	7
201	Secretaries	34	5	14.7	8
222	Clerical - shipping and receiving	85	12	14.1	9
869	Miscellaneous construction	137	15	10.9	10
209	Stenography and related occupations	80	8	10.0	11
187	Managers: lodging, personal services, amusement	31	3	9.7	12
219	Account recording occupations	66	6	9.1	13
203	Clerk-typists	75	6	8.0	14

Source: Division of Employment Security - ESARS, Table 96, SMSA 2600, Year to date, 9/30/1979: Applicants and Nonagricultural Job Openings by Occupation.

Table 15 Annual Job Openings (1976-1979) Received
At
Mount Wachusett Community College
By
Vocational Area

Rank	Vocational Area	Average No. Of Openings	Openings 1979	Openings 1978	Openings 1977	Openings 1976
1	Secretarial	145	266	150	101	64
2	Engineering Technology	47	24	124	35	3
3	Business Technology	34	35	55	26	19
4	Data Processing	20	26	13	29	12
5	Human Services*	18	29	16	9	NA
6	Nursing	8	12	12	2	7
7	Law Enforcement	8	7	7	14	4
8	Public Communication	5	14	0	5	2

* Three-year average

Source: Placement office, Mount Wachusett Community College

In sum, interview data from the two major vocational schools in the area support the same conclusion about occupational employment in the region: in general, most skilled jobs have a good outlook, but those with especially strong prospects include auto mechanics, electricians, electronics technicians, machinists, welders, and those in health occupations.

Another source to tap for information on local occupational outlook is the community college placement officer. The person in charge of placement at Mount Wachusett Community College thought that occupational employment prospects were best for engineers, technologists (two-year degree), secretaries, nurses, and those in data processing. She noted that the one area where graduates have a conspicuously hard time finding a job is law enforcement. Job openings received by the school placement office from 1976-1979 (Table 15) confirm her impressions: secretaries, engineering technologists, and data processors head the list of the most sought after graduates.

A final source of interview data came from CETA classroom training. CETA operates three occupational programs -- computer testing technician, computer operator, and secretarial. The assistant coordinator reported that all three are doing extremely well, with placement in the field of each occupation over 60 percent. Students trained as computer operators have the best rate of placement (over 80 percent).

DES data on hard-to-fill jobs and interview data from placement officers measure the current and next year's occupational employment; but they tell us little about future trends. The Occupation/Industry Research Group of the Division of Employment Security has prepared a report (June 1978) on Occupational Projections for the Fitchburg-Leominster labor area through 1985. These projections, although crude, are at present the only long-term predictions for occupational outlook Table 16 rank orders 25 vocational jobs in terms of projected growth over an eleven-year period (1974-1985).

These data have their limitations. First, even though the projections take into account proposed circumstances that will modify the directions of the past (i.e. known closing, new developments), the projections should still be viewed as essentially a continuation of past trends. In this sense, they are more useful as indicators of probable direction than as true forecasts. Note, too, that since it is already 1980, only four more years remain as projected.

Table 16 Rank Order Of Vocational Occupations
By
Total Demand, 1974-1985
Fitchburg-Leominster SMSA

Occupation	Rank	1974-1985 Total Demand	Due To Growth	Due To Separations
Secretaries other than legal, medical	1	1,306	294	1,012
Bookkeepers	2	509	14	495
Typists	3	353	45	308
Practical Nurses	3	353	122	231
Nursing Aides & Attendants	5	345	103	242
Cooks, except private	6	316	85	231
Shipping & Receiving Clerks	7	224	70	154
Sewers & Stitchers	8	196	-101	297
Bank Tellers	9	192	5	187
Electrical and Electronics Tech's	10	160	116	44
Carpenters & Apprentices	11	158	48	110
Semiskilled metal working	12	156	- 53	209
Receptionist	13	150	18	132
Hairdresser, Cosmetologist	14	145	13	132
Health Aides, except Nursing	15	130	31	99
Heavy Equipment Mechanics	16	120	21	99
Electricians & Apprentices	17	100	34	66
Computer Programmers	18	94	39	55
Machinists & Apprentices	19	85	19	66
Dental Assistants	19	85	19	66
Photographic Process Workers	21	84	29	55
Auto Mechanics & Apprentices	22	81	26	55
Clinical Lab Technologists & Technicians	23	78	12	66
Statistical Clerks	24	74	8	66
Welders and Flamecutters	25	70	26	44

Prepared by Occupation/Industry Research Department, DES, 1978

Source: Employment Requirements for the Fitchburg-Leominster Labor Market Area, By Occupation, By Industry, 1974-1985.

Table 17 Ratio Of Applicants to Job Openings
In The
Fitchburg-Leominster Labor Area
Fiscal Year 1979

2-Digit DOT Code	Occupational Group	Cumulative Active Applicants	Total Openings Received	Ratio Of Applicants To Openings
	Professional, Technical and Managerial Occupations			
00-01	Architecture, Engineering	119	34	3.5/1
02	Mathmatics and Physical Science	63	22	2.9/1
04	Life Sciences	127	36	3.5/1
07	Medicine and Health	236	35	6.7/1
09	Education	325	32	10.2/1
11	Law and Jurisprudence	11	1	11.0/1
14	Art	40	3	13.3/1
15	Entertainment & Recreation	31	0	0
16	Administrative Specializations	328	28	11.7/1
	Clerical and Sales Occupations			
20	Stenography, Typing, Related	1,064	413	2.6/1
21	Computing: Account Recording	1,199	278	4.3/1
22	Stock Clerks	241	125	1.9/1
25	Sales, Service	47	6	7.8/1
26	Sales, Commodities	60	2	30.0/1
29	Miscellaneous Sales	169	46	3.7/1
	Service Occupations			
31	Food & Beverage Preparation	888	259	3.4/1
33	Barbering.Cosmetology	56	1	56.0/1
34	Amusement, Recreation	10	1	10.0/1
36	Apparel, Furnishings	27	7	3.9/1
37	Protective Services	221	75	2.9/1
	Processing Occupations			
50	Metal Processing	11	12	0.9/1
51	Ore Refining and Foundry	7	0	0
52	Food Processing	38	31	1.2/1
53	Paper Processing	36	6	6.0/1
55	Chemical Processing	425	287	1.5/1
57	Stone, Clay Processing	3	0	0
58	Leather Processing	14	21	0.7/1
	Machine Trade Occupations			
60	Metal Machining	175	38	4.6/1
61	Metalworking	39	2	18.0/1
62/63	Mechanics/Machinery Repairers	251	46	5.4/1
64	Paperworking	28	23	1.2/1
65	Printing	37	12	3.1/1
66	Wood Machining	43	26	1.7/1
67	Machining of Stone, Clay	1	2	0.5/1
68	Textiles	101	11	9.2/1
69	Machine Trades, n.e.c.	62	32	1.9/1

Table 17 Ratio of Applicants to Job Openings
In The
Fitchburg-Leominster Labor Area
Fiscal Year 1979
(continued)

2-Digit DOT Code	Occupational Group	Cumulative Active Applicants	Total Openings Received	Ratio Of Applicants To Openings
	Benchwork Occupations			
70	Assembly, Fabrication, Repair of Metal Products	99	12	8.3/1
71	Assembly of Scientific, Medical Instr.	32	1	32.0/1
72	Electrical Equipment	136	46	3.0/1
74	Painting, Related Occupations	40	3	13.3/1
75	Plastics, Repair & Assembly	15	20	0.8/1
76	Wood Plastics & Assembly	48	24	2.0/1
78	Textile, Leather & Assembly	172	89	1.9/1
	Structural Work Occupations			
80	Metal Fabricating	84	31	2.7/1
81	Welders, Cutters	90	40	2.3/1
82	Electrical Assembling	132	92	1.4/1
84	Painting & Plastering	87	68	1.3/1
86	Construction, n.e.c.	827	356	2.3/1
89	Structural Work, n.e.c.	144	71	2.0/1
	Miscellaneous Occupations			
90	Motor Freight	362	105	3.4/1
91	Transportation	130	74	1.8/1
92	Packaging	2,142	803	2.7/1
97	Graphic Art Work	49	9	5.4/1

Source: Division of Employment Security ESARS data; Table 96 Fiscal Year 1979, Year-to-date.

IX. Labor Supply-Demand Imbalances:

Table 17 uses data from the local unemployment office: for each occupational group, it gives a ratio of the number of applicant to job openings. A very large ratio indicates that many people are applying for each job: this type of imbalance suggests a glutted market and poor employment prospects. A small ratio means few people are competing for each opening; this type of imbalance implies a lean market and good employment possibilities.

As a measure of supply-demand imbalances, these data have several restrictions. First, those who fill out job applications at the employment office may not be well qualified for the job they list on the application: many applicants either misjudge their qualifications or else are imprecise in defining them. Further, many people are required to register for work at the local office (e.g. to collect unemployment insurance or welfare benefits) and thus may not represent a serious, commited supply of labor. Finally, the openings themselves may misrepresent the demand for work: many firms, because they have federal contracts, are legally required to advertise job openings at the local office, but they may not really intend to hire through the office.

Table 17 as a tabular measure of supply-demand imbalances needs to be supplemented with first-hand information from interviews with area employers and vocational-technical school placement officers. Their observations pinpoint a number of imbalances. First, they unanimously agree on the shortage of skilled workers in the area, especially machinists. Fitchburg-Leominster is not the only labor market area troubled by this imbalance: machinists are in short supply across the state. Employers found labor shortage imbalances in other occupations, foremost among which were secretaries, electronics technicians, mechanical equipment repairers, registered nurses, and respiratory technicians. Also, certain leaders in the area's extensive plastic industry think that a course in plastics technology should be added to the trade schools' curriculum. They see a real need for workers who have some training and expertise in plastic technology.

On the other side, area employers also see imbalances created by the oversupply of labor. The teaching market is glutted right now, and will remain so for most of this decade. The pockets of strength in this profession are special education and the hard sciences, especially computer sciences. Coaching certificates prove to be helpful to those hoping to break into secondary education. The Human Services field, law enforcement, law, and commercial art are other other fields cited as having too few openings for too many people. And, finally, low skilled and unskilled workers generally have problems finding work compared to their more highly skilled counterparts.

X. Highlights and Conclusions:

Summary of 1979

For the Fitchburg-Leominster area, 1979 was a good, solid year, better than for the nation as a whole, and much better than economists predicted. After several sluggish years following the 1974-1975 recession, it appears that the local economy has now achieved stability and once more is beginning to attract business and industry. Many favorable economic indicators and signs give credibility to this belief.

To begin with, the Fitchburg-Leominster area enjoyed its lowest annual unemployment rate in the decade -- 4.9 percent. The rate has dropped steadily since the 1975 recessionary high of 13.5 percent.

Not only has the local economy achieved stability, but it has also experience a slow, steady economic growth. This growth, as Michael Lanava of the Industrial Development Commission emphasizes, is not usually the result of one or two giant firms moving in from the outside and creating hundreds of jobs. Rather, recent studies suggest that the real job growth in the area results from expansion of smaller firms already there. According to the Report on Business Expansion in the Commonwealth of Massachusetts, the Montachusett area in 1979 saw the expansion of 14 firms. Total plant expansion for the two central cities of the region amounted to almost 250,000 square feet and created over 500 new jobs.

Another indication of the area's growth over the past year is its capital investment through tax-exempt, low interest industrial revenue bonds. Fitchburg, for example, in 1978, approved only one bond and that was for $355,000. In 1979, on the other hand, it approved five industrial revenue bonds totalling four and one quarter million dollars.

The past year was also promising for local business and commerce. Samuel Bistany, director of the Leominster Chamber of Commerce, reports that retail stores did very well last year in Leominster. In downtown Fitchburg, Main Street displayed fewer empty store fronts from the 22 vacant storefronts of a few years ago, the main street has now only eight empty stores. New investors have moved into the area, renovated old buildings, and started to attract new occupants, not only at street level, but at the upper stories as well. This push for revitalization of downtown Fitchburg has been helped along by a $300,000 Massachusetts Industrial Finance Agency bond for purchase of a 11-building city block and renovation into retail and office

space. Moreover, plans have begun for traffic, safety and cosmetic improvements in the downtown area. Phase I of the so-called Urban Systems Project is already underway. Finally, the year-old municipal garage has taken hold. According to Richard Moriarty of PRIDE, Inc., "The garage is doing wonderfully;it's way ahead of our projections. There's no question it has been received very well by the people." In summary, there is a feeling, as one bank vice-president put it, that things are starting to happen. He declares that "there is a lot of activity here, and there's a favorable attitude about doing business."

Unfinished Business

Two items stand out on the agenda of unfinished business for the Fitchburg-Leominster area: 1) Commuter train service and 2) completion of Interstate 190.

First, the train service. In January of 1980, commuter train service was inagurated between Fitchburg and Boston. Ridership has increased dramatically since the service first opened: from 2,200 per week in January to over 3.000 per week in March. The service provides a comfortable means of commuting at reasonable cost, and as such it may appear to be attractive to companies wishing to locate in the area. The mayor of Leominster, Raymond Harper, maintains that the MBTA commuter rail line was a key consideration in one company's decision to locate in the area.

Although the usefulness and benefits of the train service are clearly established, its future is not. Mohammed Khan, director of the Montachusett Regional Transit Authority, said last month that the state budget may not appropriate enough funds for the service to operate. Five million dollars are needed for the entire MBTA train service next year, but so far only $3.4 million has been recommended by Governor King. If no further funds are allocated, and if the local transit authorities do not pick up the rest, the service could cease early in 1981. If this happens, 80 percent of the commuters will go back to driving cars, which means they will consume more than five million dollars in gasoline. It also means that rail service will no longer be a drawing card for outside industry.

Interstate 190 is the other key item of unfinished business. It is scheduled for completion in about a year, although work has been temporarily halted because the construction company has failed to comply with environmental guidelines. Everybody in the area is expecting big things from the highway that would cut commuting time between Worcester and Fitchburg from 47 minutes to 17 minutes. The politicians are looking towards I-190 as a convenient way to increase the tax base.

Businessmen and industry leaders expect lower operating and transportation costs. Indeed, as Michael Thonis, an investment counselor for Harvard Management Company, puts it, "Once the road is constructed, I think you are going to see some companies deciding to build along the highway." He further maintained that the road will have economic significance because it will link large population areas. The ability of I-190 to attract business to the area is more than mere conjecture. One of the area's largest commercial real estate companies has just closed a deal with a major company that will locate in the area. The president of the real estate company says that access to I-190 was decisive in influencing the company to locate in the Fitchburg-Leominster area. At any rate, it seems clear that the long-awaited completion of this highway will be a tremendous economic boon to the region.

Recession?

Some sort of recession has been predicted for over a year. And although the most recent, reliable indicators suggest that the nation has finally slipped into a recession, economists still differ widely on how severe or widespread it will be. Some economic experts say that Michigan has already suffered from a severe recession for months. Yet other regions, notably our own state of Massachusetts, show few signs of sluggish economic activity.

What, then, can one say about the prospects of a recession in the Montachusett Region? How severe will it be: Who will it affect?

Available evidence now suggests that this area will not be hard hit by the current national economic slowdown. There will be no repeat of the 1974-1975 recession. Most economic experts think the worst of it will be over by year's end.

The brunt of the recession is being borne by the automobile industry, and since this area is tied to a solid industrial base that is not directly dependent upon the automobile industry, it should come out of it in good shape.

The impact of the economic slump on specific businesses and industries will vary widely. In general, businesses with small amounts of capital and largely dependent on credit will be affected the most. The small business man will thus have a hard time. The residential real estate business and noncommercial savings and loans banks will also feel the pinch. Further, those businesses and industries specializing in luxury items will clearly suffer a drop in sales. Specific industries

in the area that are struggling right now include: the paper industry, leather, selected plastic firms, and construction.

Not all industry and business, however, will be hit by the economic slowdown. Fabricated metals and nonelectrical machinery, for example, should hold up well. They have a long turn-around time in their orders: some companies are working on orders made several years ago. One company official said that they have enough standing orders to stay in business for four years -- even if they didn't receive a single order during that time. These companies will not feel the effects of a short-term recession.

A P P E N D I X

1970 - 1979, BY MONTH. NUMBERS IN 000's

SEASONALLY UNADJUSTED AND ADJUSTED DATA

		SEASONALLY UNADJUSTED					SEASONALLY ADJUSTED				
MONTH	POPULATION	LABOR FORCE	EMPLOYMENT	UNEMPLOYMENT	MASS RATE %	NAT'L RATE %	LABOR FORCE	EMPLOYMENT	UNEMPLOYMENT	MASS RATE %	NAT RATE
1978											
JAN	4306.0	2812.8	2601.1	211.7	7.5	7.0	2814	2641	173	6.1	6.4
FEB	4309.9	2787.6	2588.5	199.1	7.1	6.9	2805	2631	174	6.2	6.1
MAR	4313.8	2793.2	2621.2	172.0	6.2	6.6	2811	2648	163	5.8	6.2
APRIL	4317.7	2788.3	2629.0	159.3	5.7	5.8	2819	2650	169	6.0	6.1
MAY	4321.6	2799.9	2648.3	151.7	5.4	5.5	2824	2659	165	5.8	6.1
JUNE	4325.5	2933.4	2730.4	203.0	6.9	6.2	2876	2671	205	7.1	5.9
JULY	4329.4	2927.6	2741.8	185.9	6.3	6.3	2863	2678	185	6.5	6.2
AUG	4332.8	2898.3	2703.6	194.7	6.7	5.8	2839	2661	178	6.3	5.9
SEPT	4336.1	2806.6	2644.9	161.7	5.8	5.7	2832	2669	163	5.8	5.9
OCT	4339.5	2796.6	2676.4	120.3	4.3	5.4	2824	2671	153	5.4	5.7
NOV	4342.9	2834.0	2685.9	148.0	5.2	5.5	2853	2690	163	5.7	5.8
DEC	4346.2	2839.8	2677.3	162.4	5.7	5.6	2866	2687	179	6.2	5.9
ANN. AVER.	4327.0	2835.0	2662.0	173.0	6.1	6.0	2836	2662	173	6.1	6.0
1979											
JAN	4349.6	2901.7	2682.7	219.0	7.5	6.4	2901	2721	180	6.2	5.8
FEB	4353.0	2915.1	2722.2	192.9	6.6	6.4	2929	2761	168	5.7	5.7
MAR	4356.3	2910.7	2716.8	193.9	6.7	6.1	2927	2743	184	6.3	5.7
APRIL	4359.7	2879.7	2727.4	152.1	5.3	5.5	2906	2744	162	5.6	5.8
MAY	4363.1	2851.9	2709.4	142.5	5.0	5.2	2880	2721	159	5.5	5.8
JUNE	4366.4	2942.9	2792.9	150.1	5.1	6.0	2884	2732	152	5.3	5.7
JULY	4369.8	2943.4	2797.4	146.0	5.0	5.8	2877	2732	145	5.0	5.7
AUG	4373.3	2930.7	2793.5	137.4	4.7	5.9	2869	2749	120	4.2	5.9
SEPT	4377.1	2906.3	2719.6	186.7	6.4	5.6	2930	2743	187	6.4	5.8
OCT	4381.3	2843.8	2719.9	123.9	4.4	5.6	2877	2719	158	5.5	5.9
NOV	4385.2	2811.2	2677.6	133.6	4.8	5.6	2836	2687	149	5.3	5.8
DEC	4389.3	2851.8	2707.5	144.1	5.1	5.6	2879	2719	160	5.6	5.9
ANN. AVER.	4369.0	2891.0	2731.0	160.0	5.5	5.8	2891	2731	160	5.5	5.8

AVERAGES MAY DIFFER DUE TO ROUNDING

MASSACHUSETTS LABOR FORCE DATA AND NATIONAL UNEMPLOYMENT RATE

1970 - 1979, BY MONTH, NUMBERS IN 000's

SEASONALLY UNADJUSTED AND ADJUSTED DATA

		SEASONALLY UNADJUSTED					SEASONALLY ADJUSTED				
MONTH	POPULATION	LABOR FORCE	EMPLOYMENT	UNEMPLOYMENT	MASS RATE %	NAT'L RATE %	LABOR FORCE	EMPLOYMENT	UNEMPLOYMENT	MASS RATE %	NAT'L RATE
1976											
JAN	4215.8	2708	2375	333	12.3	8.8	2709	2411	298	11.0	7.9
FEB	4219.2	2687	2384	304	11.3	8.7	2702	2427	275	10.2	7.7
MAR	4222.6	2668	2376	292	10.9	8.1	2691	2402	289	10.7	7.6
APRIL	4226.0	2690	2424	266	9.9	7.4	2729	2454	275	10.1	7.6
MAY	4229.4	2692	2428	264	9.8	6.7	2711	2438	273	10.1	7.4
JUNE	4232.8	2785	2533	251	9.0	8.0	2734	2482	252	9.2	7.7
JULY	4236.2	2825	2567	257	9.1	7.8	2761	2507	254	9.2	7.8
AUG	4240.1	2832	2563	269	9.5	7.6	2784	2523	261	9.4	7.8
SEPT	4243.9	2785	2547	238	8.6	7.4	2820	2577	243	8.6	7.7
OCT	4247.8	2763	2548	215	7.8	7.2	2779	2535	244	8.8	7.7
NOV	4251.7	2759	2523	236	8.6	7.4	2764	2516	248	9.0	7.8
DEC	4255.5	2708	2504	203	7.5	7.4	2722	2503	219	8.0	7.7
ANN. AVER.	4235.0	2742	2481	261	9.5	7.7	2742	2481	261	9.5	7.7
1977											
JAN	4259.4	2723.7	2446.1	277.7	10.2	8.3	2725	2484	241	8.8	7.4
FEB	4263.3	2722.1	2457.6	264.5	9.7	8.5	2740	2502	238	8.7	7.6
MAR	4267.1	2687.1	2453.9	233.2	8.7	7.9	2709	2481	228	8.4	7.4
APRIL	4271.0	2738.2	2491.0	247.2	9.0	6.9	2774	2517	257	9.3	7.2
MAY	4274.9	2760.8	2577.3	183.4	6.6	6.4	2782	2588	194	7.0	7.1
JUNE	4278.7	2812.1	2594.6	217.6	7.7	7.5	2760	2540	220	8.0	7.2
JULY	4282.6	2814.5	2596.3	218.2	7.8	7.0	2748	2533	215	7.8	6.9
AUG	4286.5	2842.8	2584.8	258.0	9.1	6.8	2787	2543	244	8.8	7.0
SEPT	4290.4	2792.0	2537.9	254.1	9.1	6.6	2821	2564	257	9.1	6.8
OCT	4294.3	2786.0	2601.7	184.3	6.6	6.3	2808	2592	216	7.7	6.7
NOV	4298.2	2790.1	2596.9	193.1	6.9	6.4	2803	2596	207	7.4	6.7
DEC	4302.1	2779.4	2616.3	163.1	5.9	6.0	2801	2621	180	6.4	6.2
ANN. AVER.	4281.0	2771.0	2547.0	225.0	8.1	7.0	2771	2547	225	8.1	7.0

MASSACHUSETTS LABOR FORCE DATA AND NATIONAL UNEMPLOYMENT RATE

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SEASONALLY UNADJUSTED AND ADJUSTED DATA

		SEASONALLY UNADJUSTED					SEASONALLY ADJUSTED				
MONTH	POPULATION	LABOR FORCE	EMPLOYMENT	UNEMPLOYMENT	MASS RATE %	NAT'L RATE %	LABOR FORCE	EMPLOYMENT	UNEMPLOYMENT	MASS RATE %	NAT'L RATE
1974											
JAN	4131.7	2593	2391	202	7.8	5.6	2590	2419	171	6.6	5.1
FEB	4135.6	2601	2386	215	8.3	5.7	2607	2419	188	7.2	5.1
MAR	4139.4	2582	2415	168	6.5	5.3	2599	2435	164	6.3	5.0
APRIL	4143.3	2549	2389	160	6.3	4.8	2587	2419	168	6.5	5.0
MAY	4147.2	2587	2420	168	6.5	4.6	2605	2426	179	6.9	5.1
JUNE	4151.0	2670	2494	177	6.6	5.8	2629	2452	177	6.7	5.3
JULY	4154.9	2690	2492	199	7.4	5.6	2645	2446	199	7.5	5.5
AUG	4158.3	2654	2472	182	6.8	5.3	2621	2431	190	7.2	5.4
SEPT	4161.7	2617	2423	195	7.4	5.7	2663	2462	201	7.5	5.9
OCT	4165.0	2645	2466	179	6.8	5.5	2655	2457	198	7.5	5.9
NOV	4168.4	2657	2463	193	7.3	6.2	2649	2450	199	7.5	6.6
DEC	4171.8	2719	2483	235	8.7	6.7	2715	2471	244	9.0	7.1
ANN. AVER.	4152.4	2631	2442	189	7.2	5.6	2631	2442	189	7.2	5.6
1975											
JAN	4175.2	2673	2381	292	10.9	9.0	2673	2413	260	9.7	8.0
FEB	4178.5	2704	2387	316	11.7	9.1	2713	2426	287	10.6	8.1
MAR	4181.9	2703	2415	289	10.7	9.1	2725	2438	287	10.5	8.5
APRIL	4185.3	2685	2380	305	11.3	8.6	2726	2412	314	11.5	8.8
MAY	4188.7	2737	2420	317	11.6	8.3	2753	2428	325	11.8	9.0
JUNE	4192.0	2767	2433	334	12.1	9.1	2721	2386	335	12.3	8.8
JULY	4195.4	2776	2451	325	11.7	8.7	2720	2397	323	11.9	8.7
AUG	4198.8	2735	2432	303	11.1	8.2	2695	2392	303	11.2	8.4
SEPT	4202.2	2663	2357	306	11.5	8.1	2703	2391	312	11.5	8.4
OCT	4205.6	2693	2410	284	10.5	7.8	2705	2397	308	11.4	8.4
NOV	4209.0	2709	2425	284	10.5	7.8	2707	2415	292	10.8	8.2
DEC	4212.4	2703	2420	282	10.4	7.8	2707	2412	295	10.9	8.2
ANN. AVER.	4193.8	2712	2410	302	11.2	8.5	2712	2410	302	11.2	8.5

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		SEASONALLY UNADJUSTED					SEASONALLY ADJUSTED				
MONTH	POPULATION	LABOR FORCE	EMPLOYMENT	UNEMPLOYMENT	MASS RATE %	NAT'L RATE %	LABOR FORCE	EMPLOYMENT	UNEMPLOYMENT	MASS RATE %	NAT'L RATE %
1972											
JAN	4012.4	2490	2289	200	8.0	6.4	2481	2311	170	6.9	5.8
FEB	4017.6	2467	2297	170	6.9	6.4	2465	2318	147	6.0	5.7
MAR	4022.9	2492	2316	176	7.1	6.1	2498	2333	165	6.6	5.8
APRIL	4028.2	2487	2345	142	5.7	5.5	2516	2368	148	5.9	5.7
MAY	4033.5	2464	2325	139	5.6	5.1	2484	2328	156	6.3	5.6
JUNE	4038.8	2504	2344	160	6.4	6.2	2472	2310	162	6.6	5.6
JULY	4044.1	2497	2320	177	7.1	5.8	2473	2289	184	7.4	5.6
AUG	4049.5	2497	2356	140	5.6	5.5	2466	2311	155	6.3	5.6
SEPT	4054.8	2416	2258	157	6.5	5.4	2462	2301	161	6.5	5.6
OCT	4060.2	2439	2279	160	6.6	5.1	2456	2282	174	7.1	5.7
NOV	4065.6	2508	2347	161	6.4	4.9	2495	2335	160	6.4	5.2
DEC	4070.9	2517	2372	144	5.7	4.7	2504	2357	147	5.9	5.1
ANN. AVER.	4041.5	2479	2320	160	6.4	5.6	2479	2320	160	6.4	5.6
1973											
JAN	4076.3	2563	2386	177	6.9	5.5	2557	2410	147	5.7	4.9
FEB	4081.7	2518	2335	184	7.3	5.6	2520	2361	159	6.3	5.0
MAR	4087.0	2529	2330	200	7.9	5.2	2540	2347	193	7.6	4.9
APRIL	4092.4	2510	2351	158	6.3	4.8	2544	2378	166	6.5	5.0
MAY	4097.8	2512	2369	143	5.7	4.3	2529	2373	156	6.2	4.9
JUNE	4103.1	2595	2438	156	6.0	5.4	2557	2401	156	6.1	4.8
JULY	4108.5	2590	2450	141	5.4	5.0	2556	2413	143	5.6	4.8
AUG	4112.4	2597	2450	148	5.7	4.7	2569	2408	161	6.3	4.8
SEPT	4116.2	2498	2339	159	6.4	4.7	2545	2381	164	6.4	4.8
OCT	4120.1	2557	2386	172	6.7	4.2	2571	2383	188	7.3	4.6
NOV	4124.0	2577	2358	219	8.5	4.5	2567	2345	222	8.6	4.8
DEC	4127.8	2588	2400	186	7.2	4.5	2577	2385	192	7.5	4.9
ANN. AVER.	4103.9	2557	2386	171	6.7	4.9	2557	2386	171	6.7	4.9

MASSACHUSETTS LABOR FORCE DATA AND NATIONAL UNEMPLOYMENT RATE

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		SEASONALLY UNADJUSTED					SEASONALLY ADJUSTED				
ONTH	POPULATION	LABOR FORCE	EMPLOYMENT	UNEMPLOYMENT	MASS RATE %	NAT'L RATE %	LABOR FORCE	EMPLOYMENT	UNEMPLOYMENT	MASS RATE %	NAT'L RATE %
1970											
AN	3897.1	2444	2353	91	3.7	4.2	2437	2377	60	2.5	.9
EB	3901.7	2489	2386	102	4.1	4.7	2483	2400	83	3.3	.2
AR	3906.4	2434	2332	104	4.3	4.6	2439	2351	88	3.6	4.4
PRIL	3911.0	2433	2322	111	4.6	4.3	2456	2341	115	4.7	4.6
AY	3915.6	2453	2360	94	3.8	4.1	2472	2359	113	4.6	4.7
UNE	3920.3	2483	2386	97	3.9	5.6	2460	2358	102	4.1	4.9
JLY	3924.9	2467	2372	94	3.8	5.3	2456	2350	106	4.3	5.0
JG	3929.6	2519	2410	109	4.3	5.0	2483	2360	123	5.0	5.1
EPT	3934.2	2420	2294	125	5.2	5.2	2463	2336	127	5.2	5.4
CT	3938.8	2445	2320	124	5.1	5.1	2465	2328	137	5.6	5.6
OV	3943.5	2487	2329	157	6.3	5.5	2471	2319	152	6.2	5.9
EC	3948.1	2480	2332	148	6.0	5.6	2466	2316	150	6.1	6.1
NN. VER.	3922.6	2462	2349	114	4.6	4.9	2462	2349	114	4.6	4.9
1971											
N	3952.8	2448	2252	196	8.0	6.6	2439	2274	165	6.8	5.9
EB	3957.4	2453	2281	173	7.1	6.6	2450	2297	153	6.2	5.9
AR	3962.0	2454	2277	177	7.2	6.3	2458	2295	163	6.6	5.9
RIL	3966.7	2438	2282	156	6.4	5.7	2464	2303	161	6.5	5.9
Y	3971.3	2410	2280	131	5.4	5.3	2430	2281	149	6.1	5.9
UNE	3976.0	2459	2295	164	6.7	6.5	2432	2264	168	6.9	5.9
LY	3980.6	2446	2297	149	6.1	6.2	2431	2272	159	6.5	6.0
JG	3985.9	2497	2321	177	7.1	5.9	2464	2273	191	7.8	6.1
EPT	3991.2	2433	2267	167	6.9	5.8	2481	2311	170	6.9	6.0
CT	3996.5	2416	2281	134	5.6	5.4	2434	2287	147	6.0	5.9
OV	4001.8	2469	2307	162	6.5	5.7	2455	2297	158	6.4	6.0
EC	4007.1	2472	2303	168	6.8	5.5	2457	2287	170	6.9	6.0
NN. VER.	3979.1	2448	2286	161	6.~~7~~6	5.9	2448	2286	161	6.6	5.9

AVERAGES MAY DIFFER DUE TO ROUNDING

ANNUAL PLANNING INFORMATION REPORT FISCAL YEAR 1982 FITCHBURG-LEOMINSTER SMSA

LABOR AREA RESEARCH PUBLICATION

Massachusetts Division of Employment Security

job market research

THE COMMONWEALTH OF MASSACHUSETTS
DIVISION OF EMPLOYMENT SECURITY
Charles F. Hurley Building
Government Center, Boston, MA. 02114

ANNUAL PLANNING INFORMATION REPORT
FISCAL YEAR 1982

FITCHBURG-LEOMINSTER, MASSACHUSETTS
STANDARD METROPOLITAN STATISTICAL AREA

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Maps

I. Highlights and Conclusions

The 1980 Census shows that population in the Fitchburg-Leominster SMSA was 99,957, an increase of 2,793 or 2.9 percent. The average nonagricultural employment for 1980 was 34,900, up 3.3 percent from the 1979 average of 33,800. The largest gains were in the construction and service-oriented industries.

Manufacturing industries made up 47.6 percent of nonagricultural employment in 1980, while nonmanufacturing industries accounted for 52.4 percent. The annual average unemployment rate for 1980 rose 1.2 percentage points to 6.1 percent, indicating a slight reaction to the 1980 recession.

Recent unemployment rates for the Fitchburg-Leominster SMSA have tended to stay slightly higher than the state rates and significantly lower than the national rates.

According to the Lawrence Berkeley Laboratories, which has made projections based on the 1970 Census, the local area labor force will have increased by 6,363 individuals or 15.5 percent by the end of 1982.

The higher labor force participation rates of teenagers and women have greatly altered the characteristics of the local labor force.

A majority of job openings received and filled at the Fitchburg Job Matching Center are in the $3.35 to $4.50 hourly wage range.

The average salary for job openings received at the Fitchburg Job Matching Center is more than 10 percent below the state average.

Conclusion

The Fitchburg-Leominster SMSA experienced a slow, steady climb from the depths of the 1974-1975 recession in the latter half of the 1970s. This culminated in a decade low 4.9 percent unemployment rate in 1979. This rate rose to 6.1 percent in 1980, indicating some reaction to the 1980 recession. Despite this increase, the local area has achieved economic stability, and is experiencing slow, steady, economic growth.

Progress in the local economy can be attributed to its broad base of industrial employment supported by a diversified labor pool. Development of industrial parks and improvements in road networks are also contributing factors.

The Massachusetts Industrial Finance Agency has been a key factor in local area growth. Tax-exempt, low-interest industrial revenue bonds have played a major role in the revitalization of downtown Fitchburg. Old buildings have been renovated and new storefronts put up. 1982 should show the completion of street and sidewalk beautification programs and the completion of all major exterior renovations to buildings in the central core of Main Street. Already, the revitalization has provided 200 new jobs to the downtown area. It is now expected that individual property owners and investors will make major indoor improvements. As a result, new retail business and office occupants will be attracted to the area.

The influence of the Massachusetts Industrial Finance Agency has extended to the industrial parks. As a result of local bonding, buildings are being constructed, new businesses are opening, and established businesses are expanding.

Interstate 190, even though incomplete, has already proven to be a major attraction for new business. The influence of its access has been decisive in attracting new companies to the area. Completion of this project should generate increased economic growth.

Although energy is readily available, the steadily increasing costs are becoming a major problem in the area. Numerous industries report that they could anticipate some tremendous growth rates if they could be assured of steady energy costs. Local employers are making a great effort to soften the energy blow through conservation and cogeneration programs.

There will be significant reductions in government employment due to reductions in state and local government because of Proposition $2\frac{1}{2}$. These reductions will accelerate due to the federal staffing cutbacks slated for October, 1981.

While demand for goods and services increases, nonagricultural employment should continue to increase in 1982, at a rate of about 2 percent. The manufacturing sector should experience growth in the production of both durable and nondurable goods.

Nonmanufacturing industries will also show growth, though the pace probably won't be as fast as in most recent years. Most gains will be in the construction and service-oriented occupations. Despite some adverse factors, such as energy costs and reductions in government employment and services, most evidence indicates that the Fitchburg-Leominster SMSA should maintain its economic strength and realize both employment and production growth in 1982.

IIA. Definition and Description of the Area

Definition of Labor Market Area

The Fitchburg-Leominster Standard Metropolitan Statistical Area (SMSA) includes the twin cities of Fitchburg and Leominster and the towns of Lunenburg, Shirley, Townsend and Westminster. It is located in Worcester County and is bordered by Franklin County to the West and Middlesex County to the East.

Definition of CETA Subgrantee Areas

The Subgrantee responsible for the delivery of CETA classroom training, work experience, on-the-job training and supportive services is the city of Fitchburg, presently contracting with the Montachusett Employment and Training Program, Inc., Gardner, Mass. The area of service is geographically defined by the following 26 cities and towns:

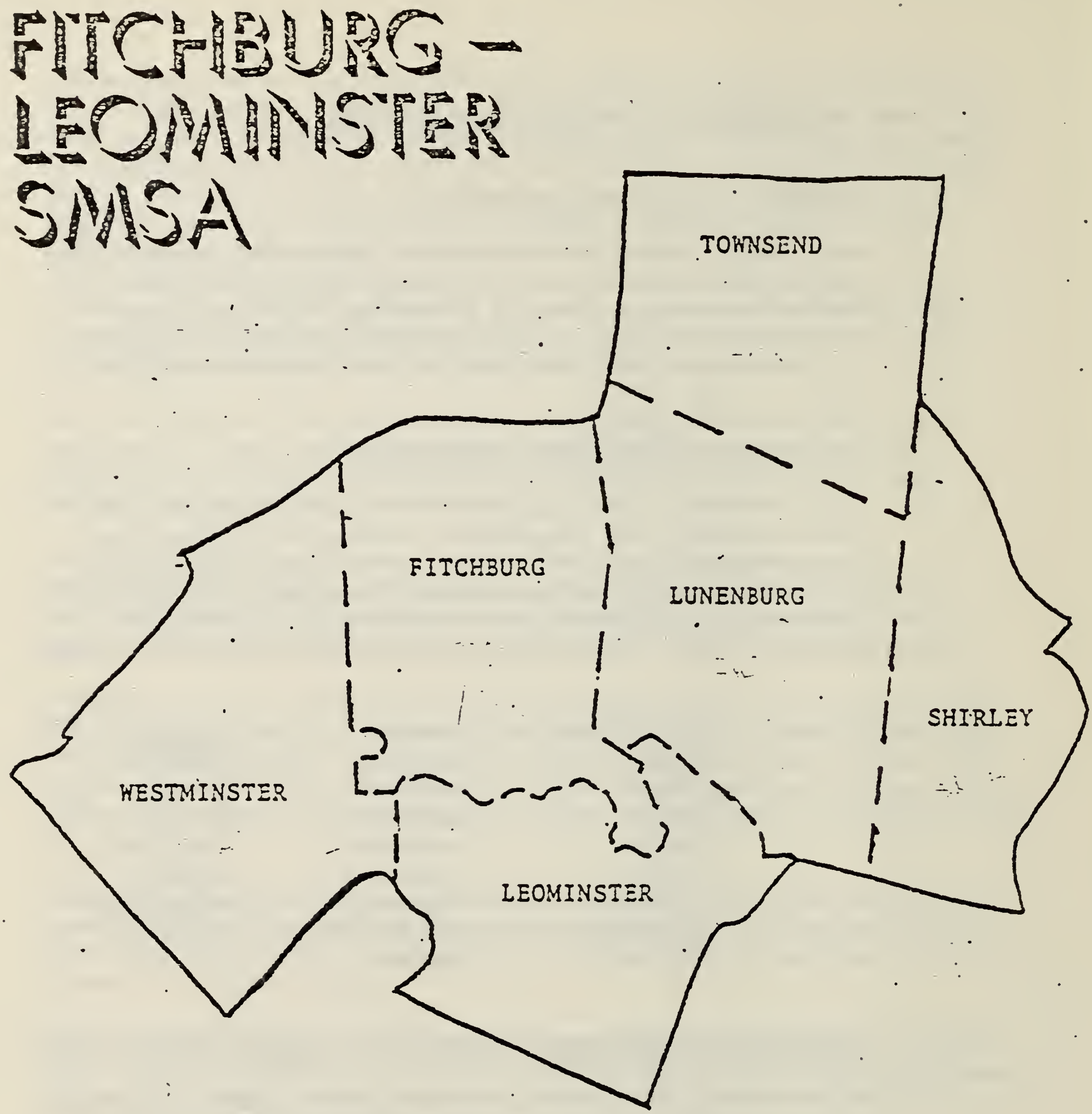
Ashburnham	Groton	Pepperell
Ashby	Hardwick	Princeton
Ayer	Harvard	Shirley
Barre	Hubbardston	Sterling
Berlin	Lancaster	Templeton
Bolton	Leominster	Townsend
Clinton	Lunenburg	Westminster
Fitchburg	New Braintree	Winchendon
Gardner	Oakham	

Definition of Fitchburg Job Matching Center Area of Service

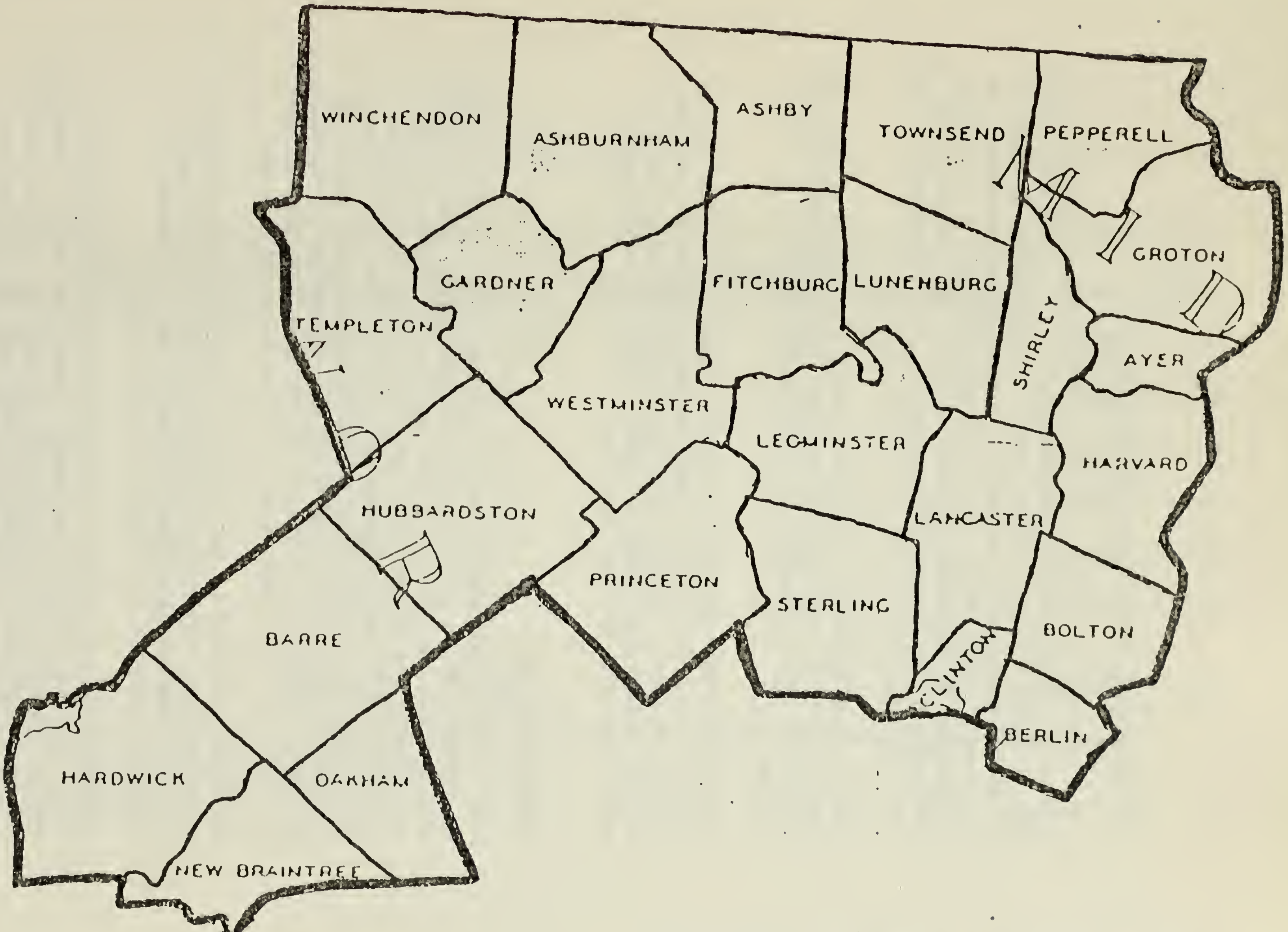
The Fitchburg Job Matching Center provides job information, job development and placement, employment counseling and testing, and services to special applicant groups for the following cities and towns:

Ashby	Leominster
Ayer	Lunenburg
Fitchburg	Pepperell
Fort Devens	Shirley
Groton	Townsend
Harvard	

Map 1


FITCHBURG - LEOMINSTER SMSA
TOWNSEND
FITCHBURG
LUNENBURG
SHIRLEY
WESTMINSTER
LEOMINSTER

Map 2



MONTACHUSETT EMPLOYMENT AND TRAINING PROGRAM
CETA Subgrantee

Geographical Description and Topography

The Fitchburg-Leominster SMSA is located in the Montachusett region of north central Massachusetts. It is a hilly region, 400 to 1,000 feet above sea level. Montachusett is made up of many lakes, ponds, waterfalls and forested sections. The Nashua and Squannacook Rivers are located here. The region is bounded on the north by Peterborough, New Hampshire and on the south by Princeton, Massachusetts. It is bounded on the west by Royalston and on the east by Groton.

Boston, New England's principal metropolis, is less than one hour's drive to the east. Worcester is located 25 miles to the south and Springfield is approximately 50 miles to the southwest.

The Montachusett Regional Planning Commission conducted and published a 1977 study on existing and probable future land use in the area. Table 1 shows the 1976 existing land use for the Fitchburg-Leominster SMSA. Table 2 reflects probable land use for 1985 and 1990.

Transportation

The Fitchburg-Leominster SMSA is served by an excellent highway network which supports its economic base. Routes 2, 2A, and 119 link the area with east and west. Routes 12, 13, 31 and 140 are the major roads connecting north with south. Interstate 495 passes through the eastern part of the region. Interstate 190, linking the Fitchburg-Leominster area with the Worcester area, is scheduled for completion in the spring of 1982. This will provide a major connection between the SMSA and the principal markets of the Atlantic Seaboard.

The area is served by two municipal airports, two freight railroads and numerous bus and truck lines. Furthermore, Logan International Airport in Boston and the Worcester Municipal Airport are within an hour's drive.

The Montachusett Regional Transportation Authority(MART) is soley responsible for area transit needs and public transportation. The Authority contracts out through private carriers for local service. Fitchburg, Leominster and Gardner are the charter members of the Authority, while the towns of Ashburnham, Ayer and Shirley have been added since the 1979 implementation.

Table 1
Existing Land Use (1976) Acreages
Fitchburg-Leominster SMSA

City or Town	Total	Low Density Residential	High Density Residential	Commercial	Industrial	Agri-Cultural	Recreational	Water	Open Space
Fitchburg	17,827	650	2,544	386	523	975	308	261	12,180
Leominster	18,978	--	4,422	388	765	1,510	38	564	11,291
Lunenburg	17,966	638	1,451	165	43	1,696	--	919	13,054
Shirley	10,143	348	595	16	30	297	--	48	8,409
Townsend	20,992	661	1,216	37	17	943	--	116	18,002
Westminster	24,050	1,009	602	10	67	1,197	--	769	20,396
TOTAL	109,956	3,706	10,830	1,002	1,445	6,618	346	2,677	83,332

Source: Montachusett Regional Planning Commission
October, 1977 Study

Table 2
Probable Future Land Use
1985 and 1990
Fitchburg-Leominster SMSA

City or Town	1985			1990		
	Low Density Residential	High Density Residential	Industrial	Low Density Residential	High Density Residential	Industrial
Fitchburg	650	2,731	554	650	2,731	642
Leominster	--	4,840	817	--	5,127	921
Lunenburg	703	1,640	43	738	1,787	43
Shirley	833	670	30	860	710	30
Townsend	730	1,342	17	762	1,447	17
Westminster	1,092	725	104	1,142	826	181

Source: Montachusett Regional Planning Commission
October 1, 1977 Study

Communities are free to become members of the Authority at no cost. Ridership figures through February, 1981 reflect an increase of approximately 10,000 passengers since February 1980.

A commuter rail service is available which provides access to outside areas. Originating in Gardner, the service has stations in Fitchburg, North Leominster, Shirley, Ayer and Littleton. Area Residents can commute as far east as Boston. There has been much concern over the continued existence of the rail service because it is solely funded by the state. According to the Montachusett Regional Planning Commission, the policy of the current administration is to continue the service, at least through Fiscal Year 1982. A bill has been submitted to the legislature providing full funding through June 30, 1982.

Note: In the narrative text of this report, the terms SMSA and labor market are used interchangeably. The Fitchburg-Leominster Area has been determined a Standard Metropolitan Statistical Area by the Office of Management and Budget.

In the Labor Area Unemployment Statistics (LAUS) Program, the SMSA is colloquially referred to as a labor market area.

Population and Labor Force Characteristics

The Fitchburg-Leominster SMSA realized a 2.9 percent increase in population over the last decade, according to the 1980 Census. Table 3 provides the 1980 Census figures for the cities and towns in the labor market area. The city of Fitchburg shows a decline in population of 8.7 percent.

Projections have been made for the population and labor force through 1982. These projections, based on the 1970 Census, are shown in Table 4 .

A 15.5 percent increase in the labor force is predicted through 1982. Nonwhite males and females reflect the largest percentage increases (196.2 +373.0 respectively) because they make up a very small proportion of the population.

The number of white males in the labor force is expected to remain about the same, while a 32.2 percent increase in white females is anticipated. Decreases are predicted in the numbers of white older workers. On the other hand, sizeable increases are expected in the nonwhite older workers category. More younger workers will be entering the labor force, with nonwhites entering at a faster pace than whites.

Labor force participation represents the proportion of the civilian adult population which is actively seeking work. Table 5 shows the labor force participation rates for various segments of the local population projected through 1982. An analysis of this table can provide some interesting points. For example, white females in the 35 to 44 year old age group have a participation rate of 72.2 percent, a strong indication of the increasing numbers of women who are becoming primary or secondary household wage earners. The percentage is even higher for black females, though the projection is significantly smaller. As a result of economic and social needs, teenage participation in the labor force has increased for all population groups.

Table 3
1980 Census By Population and Housing
Fitchburg-Leominster SMSA
Final Counts

	Population			Housing Units		
	1980 Census	1970 Census	Percent Change 1970 to 1980	1980 Census	1970 Census	Percent Change 1970 to 1980
Labor Market Area	99,957	97,164	2.9	37,683	32,076	17.5
Fitchburg	39,580	43,343	- 8.7	15,347	14,821	3.5
Leominster	34,508	32,939	4.8	12,988	10,375	25.2
Lunenburg	8,405	7,419	13.3	3,133	2,532	23.7
Shirley	5,124	4,909	4.4	1,829	1,463	25.0
Townsend	7,201	4,281	68.2	2,404	1,321	82.0
Westminster	5,139	4,273	20.3	1,982	1,564	26.7

Table 4
Labor Force Composition Projected Change
Fitchburg-Leominster SMSA
1970 - 1982

Race and Age	April 1, 1970	July 1, 1982	Change 1970 to 1982	
			Number	Percent
TOTAL	40,934	47,297	6,363	15.5
White Males	24,136	24,311	175	0.7
16-17	937	1,359	422	45.0
18-19	950	1,340	390	41.1
20-24	2,763	3,968	1,205	43.6
25-34	4,909	4,761	-148	-3.0
35-44	4,767	4,665	-102	-2.1
45-64	8,846	7,364	-1,482	-16.8
65+	964	854	-110	-11.4
White Females	16,461	21,767	5,306	32.2
16-17	746	1,657	911	122.0
18-19	968	1,346	378	39.0
20-24	2,444	3,171	727	29.7
25-34	2,251	4,557	2,306	102.4
35-44	3,039	4,003	964	31.7
45-64	6,255	6,289	34	0.5
65+	758	744	-14	-1.8
Nonwhite Males	212	628	416	196.2
16-17	10	52	42	420.0
18-19	4	27	23	575.0
20-24	18	110	92	511.1
25-34	49	62	13	26.5
35-44	53	116	63	118.9
45-64	78	261	183	235.0
65+	0	0	0	0
Nonwhite Females	125	591	466	373.0
16-17	5	38	33	660.0
18-19	0	0	0	0
20-24	13	65	52	400.0
25-34	31	74	43	138.7
35-44	57	214	157	275.0
45-64	10	187	177	1770.0
65+	9	13	4	44.4

Source: Lawrence Berkeley Civilian Labor Force Compositions Projections

Table 5
Population and Labor Force Composition Projections
Fiscal Year 1982

Fitchburg-Leominster SMSA

Category	Population	Labor Force	Employment	Unemploy-ment	Unemploy-ment Rate	Labor Force Participation Rate
16 Years and Older	77,392	47,297	44,269	3,028	6.4	61.1
White Male	34,734	24,311	23,107	1,204	5.0	70.0
16-17	1,974	1,359	1,251	108	7.9	68.8
18-19	1,974	1,340	1,257	83	6.2	67.9
20-24	4,845	3,968	3,625	343	8.6	81.9
25-34	5,608	4,761	4,514	247	5.2	84.9
35-44	5,534	4,665	4,579	86	1.8	84.3
45-64	10,095	7,364	7,100	264	3.6	72.9
65+	4,704	854	781	73	8.5	18.2
White Female	40,431	21,767	20,071	1,696	7.8	53.8
16-17	1,952	1,657	1,459	198	11.9	84.9
18-19	1,952	1,346	1,233	113	8.4	69.0
20-24	4,845	3,171	2,884	287	9.1	65.5
25-34	6,856	4,557	4,192	365	8.0	66.5
35-44	5,547	4,003	3,743	260	6.5	72.2
45-64	11,479	6,289	5,867	422	6.7	54.8
65+	7,800	744	693	51	6.9	9.5
Black Male	611	402	351	51	12.7	65.8
16-17	73	52	NA	NA	NA	71.0
18-19	73	27	NA	NA	NA	36.4
20-24	128	81	NA	NA	NA	63.0
25-34	58	49	NA	NA	NA	85.1
35-44	72	51	NA	NA	NA	70.6
45-64	182	142	NA	NA	NA	78.1
65+	25	0	NA	NA	NA	0.0
Black Female	445	219	213	6	2.7	49.2
16-17	44	38	NA	NA	NA	86.6
18-19	44	0	NA	NA	NA	0.0
20=24	84	30	NA	NA	NA	36.0
25-34	83	68	NA	NA	NA	81.9
35-44	78	66	NA	NA	NA	84.9
45-64	67	4	NA	NA	NA	5.5
65+	45	13	NA	NA	NA	30.0

Table 5
Population and Labor Force Composition Projections
Fiscal Year 1982

Fitchburg-Leominster SMSA
(continued)

Category	Population	Labor Force	Employment	Unemploy-ment	Unemploy-ment Rate	Labor Force Participation Rate
Other Male	405	226	226	0	0.0	55.8
16-17	36	0	NA	NA	NA	0.0
18-19	36	0	NA	NA	NA	0.0
20-24	50	29	NA	NA	NA	58.8
25-34	16	13	NA	NA	NA	83.4
35-44	76	65	NA	NA	NA	84.9
45-64	160	119	NA	NA	NA	74.4
65+	31	0	NA	NA	NA	0.0
Other Female	766	372	301	71	19.1	48.6
16-17	48	0	NA	NA	NA	0.0
18-19	48	0	NA	NA	NA	0.0
20-24	124	35	NA	NA	NA	28.2
25-34	33	6	NA	NA	NA	19.3
35-44	174	148	NA	NA	NA	84.9
45-64	268	183	NA	NA	NA	68.5
65+	71	0	NA	NA	NA	0.0
Nonwhite Male	1,016	628	577	51	8.1	61.8
16-17	109	52	NA	NA	NA	47.7
18-19	109	27	NA	NA	NA	24.8
20-24	178	110	NA	NA	NA	62.0
25-34	74	62	NA	NA	NA	84.0
35-44	148	116	NA	NA	NA	78.4
45-64	342	261	NA	NA	NA	76.3
65+	56	0	NA	NA	NA	0.0
Nonwhite Female	1,211	591	514	77	13.0	48.8
16-17	92	38	NA	NA	NA	41.3
18-19	92	0	NA	NA	NA	0.0
20-24	208	65	NA	NA	NA	31.3
25-34	116	74	NA	NA	NA	63.8
35-44	252	214	NA	NA	NA	84.9
45-64	335	187	NA	NA	NA	55.8
65+	116	13	NA	NA	NA	11.2

Source: Lawrence-Berkeley Civilian Labor Force Composition Projections.

IIB. ASSUMPTIONS AND PROJECTIONS FOR THE ECONOMY COMMONWEALTH OF MASSACHUSETTS FEDERAL FISCAL YEAR 1982 (FFY'82)

The Job Market Research staff of the Division of Employment Security gathers data; analyzes and reports on changes in the state's employment and unemployment situation. Even utilizing the most current data and computer models of the state and national economies, it is difficult to project future economic conditions. Forecasting is especially difficult during times of rapid change, such as we have been experiencing. The economic forecasts presented in this report are based on data available at the end of May, 1981.

1) Employment

Total employment in Massachusetts, reported in the Current Population Statistics (CPS) series, is expected to average 2,814,000 during FFY'82, an increase of about 30,000 from FFY'81.

Nonagricultural wage and salary jobs, reported in the Current Employment Statistics series (CES-790) is expected to average 2,731,100, an increase of 50,000 jobs from FFY'81 to FFY'82.

It is important to remember that the CPS estimates the number of people employed or unemployed based on their place of residence, whereas the CES-790 estimates the number of jobs based on employer location. Massachusetts has traditionally had a large proportion of dual job holders. Much of the job increase in services and in wholesale and retail trade will be part-time positions.

PROJECTED EMPLOYMENT BY INDUSTRY GROUP

Industry	Employment (in 000's)		
	FFY 1980 (Actual)	FFY 1981 (Projected) 1/	FFY 1982 (Projected)
TOTAL NONAGRICULTURAL EMPLOYMENT	2642.2	2679.1	2731.1
Manufacturing - Total	675.7	669.1	681.6
Durable Goods	409.5	410.8	425.1
Nondurable Goods	266.2	258.3	256.5
Construction	74.8	74.3	81.7
Transportation, Communications and Public Utilities	122.0	124.8	125.2
Wholesale and Retail Trade	570.7	579.2	594.0
Finance, Insurance and Real Estate	157.6	162.5	165.4
Services	629.2	664.8	690.1
Government	412.3	404.3	393.1
Federal	58.5	57.5	56.0
State	97.5	98.6	96.6
Local	256.5	248.2	240.5

1/ Projection based on actual data for seven months and estimates for five months.

2) Unemployment

We project that Massachusetts' unemployment rate will average 5.7 percent during FFY'82, down from 5.9 percent in FFY'81 and one to one-and-a-half percentage points below the national average of 6.9 percent in FFY'82.

	MASSACHUSETTS				U.S.
	Labor Force (in 000's)	Employment (in 000's)	Unemployment (in 000's)	Unemp. Rate(%)	Unemp. Rate(%)
FFY'80	2863.6	2703.3	160.3	5.6	6.8
FFY'81	2957.1	2783.8	173.3	5.9	7.4
FFY'82	2984.1	2814.0	170.1	5.7	6.9

3) Labor Turnover in Manufacturing

Due to a strengthening economy, the number of layoffs is anticipated to decline in FFY'82. On the other hand, the level of quits may also be comparatively low, reflecting in part some uncertainty among the labor force about the strength of the job market. Recalls, which are a function of prior layoffs will be low. The growth in the durable goods industries will be reflected in a stronger rate of new hires.

4) Wages and Inflation

Wages are expected to increase by 8.7 percent, down slightly from the 9.5 percent increase in FFY'81. Total Massachusetts personal income, however, is expected to rise by nearly 11.5 percent. If the proposed decrease in federal personal income taxes takes effect, total disposable income may rise by as much as 12.5 percent. For the first time in several years, the increase in personal income will be greater than the rate of inflation. The era of double-digit inflation is expected to end during FFY'82. The projected increase in the Boston Consumer Price Index (CPI) is 8.7 percent, down from the 11.4 percent in FFY'81. Massachusetts' FFY'81 and '82 rates are both below the national CPI increases for these periods.

5) Credit

Consumers wanting loans of any type; mortgage, home repair, car, or personal; will find that the supply of money will continue to be very tight, with interest rates remaining variable but high throughout FFY'82. Currently, interest rates on home mortgages are over 16 percent, on personal loans over 18 percent, and on commercial and construction loans about 20 percent, however, loans are being made at both higher and lower rates. Banks and credit unions have significantly decreased or stopped making certain kinds of loans altogether.

A major cause of the tight money situation is the shift of money from regular savings accounts, where rates are limited by law, to savings certificates, money market accounts, and treasury obligations. All interest rates are sensitive to changes in U.S. Treasury and Federal Reserve Bank Policies. The size of the Federal tax cut and of the Federal budget deficit will influence the amount and cost of credit in FFY'82. More loan money is expected to go to commercial borrowers next year rather than to those purchasing homes or cars.

There are several pieces of legislation pending before Congress which are expected to affect the level of savings, and thus the amount of credit available. Perhaps the most important is the tax cut, which will increase the amount of disposable (and potentially savable) income. Congress is also considering bills that would: 1.) free certain amounts of savings income from taxes, and 2.) gradually lift the restrictions on the amount of interest banks can pay on passbook accounts.

6) Defense Contracts

Defense contract spending is expected to increase. The dollar value of military prime contracts going to Massachusetts firms has been over five percent of the total awarded nationally for the last three years. We expect our percentage share of the awards to remain steady or increase slightly. With the proposed increase in military spending in the coming years, defense contracts in Massachusetts should provide strong support for the state's economy.

7) Energy

Energy costs are not expected to rise as rapidly during FFY'82 as they have in the recent past. From January 1979 to January 1981 the average price for a gallon of home heating oil rose 104.7 percent in Massachusetts. Continued conservation and conversion to less expensive energy sources will help to hold future prices down. The industrial mix in Massachusetts is not, relatively, energy intensive, therefore, we do not expect that rising energy costs will hurt our industrial production to the extent it may in the rest of the nation. The present world oil glut should moderate gasoline and oil prices. The unknown in the energy situation remains Mideast political conflicts.

8) Exports

Massachusetts will continue to rank among the top ten states exporting manufactured products. Our leading exports will remain high technology equipment: instruments, electronic equipment, and computers. The actual demand for these products will be influenced by the rate of economic recovery in the European Common Market countries.

Table 6
Nonagricultural Wage and Salary Employment
By Major Industrial Groups, Projections
For 1981 and 1982
Fitchburg-Leominster SMSA

2-Digit SIC Code	Industry	Actual (in 000's) Annual Average 1979	Actual (in 000's) Annual Average 1980	Projection Annual Average 1981	Projection Annual Average 1982
	Nonagricultural-Total	33.8	34.9	35.5	36.3
	Manufacturing-Total	16.2	16.6	16.8	17.3
	Durable Goods	6.3	6.8	6.9	7.1
33	Primary Metals	.3	.3	.3	.4
34	Fabricated Metals	.4	.4	.5	.5
35	Machinery (nonelec.)	4.3	4.2	4.3	4.5
25	Furniture & Fixtures	.5	.4	.4	.3
24	Lumber	.5	.4	.3	.3
	All Other Durables#*	.3	1.1	1.1	1.1
	Nondurable Goods	9.9	9.8	9.9	10.2
30	Rubber & Plastics	3.8	3.9	4.0	4.2
26	Paper & Allied Prod.	2.0	1.9	2.0	2.1
23	Apparel & Allied Prod.	.9	1.0	1.0	1.1
22	Textiles	.4	.3	.3	.3
27	Printing, Publishing	.8	.7	.6	.6
28	Chemicals	.8	.8	.8	.7
	All Other Nondurables**	1.2	1.2	1.2	1.2
	Nonmanufacturing - Total	17.6	18.3	18.7	19.0
15-17	Contract Construction	1.2	1.4	1.5	1.6
40-49	Transp. Public Utilities	1.3	1.3	1.3	1.3
50-59	Wholesale, Retail	8.4	8.5	8.5	8.6
60-69	Finance, Insurance, Real Estate	1.2	1.2	1.3	1.3
70-89	Misc. Services	5.5	5.9	6.1	6.2

Source: ES-202 Employment and Wage Summary
Projections: Link Relative Method with Adjustments.
Industries within this category underwent Economic Recoding in 1979.
* Includes Petroleum (29); Stone, Clay and Glass (32); Electrical Equipment (36); Motor Vehicle Equipment (37); Scientific Instruments (38);
** Includes Food (20); Leather (31); Misc. Manufacturing (39);

Note: Numbers are in thousands.
Government employment is not included.

Table 7
Industry Share As Percent Of
Total Nonagricultural Employment
Fitchburg-Leominster SMSA

2-Digit SIC Code	Industry	Fiscal Year 1979	Fiscal Year 1980
	NONAGRICULTURAL TOTAL	100.0	100.0
	Manufacturing Total	48.0	47.6
	Durable Goods	18.6	19.5
33	Primary Metals	1.0	1.0
34	Fabricated Metals	1.2	1.1
35	Machinery	12.7	12.0
25	Furniture & Fixtures	1.5	1.1
24	Lumber	1.5	1.1
	All Other Durables	1.0	3.2
	Nondurable Goods	29.3	28.1
30	Rubber & Plastics	11.2	11.2
26	Paper & Allied Products	6.0	5.4
23	Apparel & Allied Products	2.7	2.9
22	Textiles	1.2	1.0
27	Printing & Publishing	2.4	2.0
28	Chemicals	2.4	2.2
	All Other Nondurables	3.6	3.4
	Nonmanufacturing Total	52.1	52.4
15-17	Construction	3.6	4.0
40-49	Transportation, Public Util.	3.8	3.7
50-59	Wholesale, Retail Trade	24.9	24.4
60-69	Finance, Insurance, Real Estate	3.6	3.4
70-89	Miscellaneous Services	16.3	16.9

Note: Government not included

III. Employment Developments and Outlook by Industry

A. Introduction

The table providing actual and projected industrial employment has been constructed from nonagricultural wage and salary data. Commonly referred to as the ES-202 report, this data is compiled in a quarterly report on employment and wages covered by the Massachusetts and federal unemployment insurance laws. This is the most comprehensive employer based data available and accounts for about 97 percent of private wage and salary employment.

Total nonagricultural employment increased around 3 percent between 1979 and 1980. Employment should continue to grow through 1982, but at a smaller rate of about 2 percent. All indications show a strong employment picture for the Fitchburg-Leominster labor market area. Contributing to this strength is a broad base of industrial employment and, more importantly, a diversified and skilled labor pool. In addition, there are two vocational-technical schools in which training covers all major trades. Lastly, the geographical location of the labor area is a factor. Commercial real estate is less expensive than in more urban areas, yet goods and products can reach over 20 million people in less than five hours.

As employment increases, so does the demand for goods and services. Along with employment, the production of goods and services, which increased in 1980, should continue to grow in 1981 and 1982. The demand for capital goods (capital investment), which improved over the past year, should also go up.

New construction had been limited to public projects for a long time. However, more and more commercial buildings are being built with the help of bonding from the Massachusetts Industrial Finance Agency. Expansion and relocation of businesses in the area should continue as long as this bonding remains available.

Energy will be readily available, but the cost will be detrimental to any desired growth. Industries are trying to soften the energy blow through conservation and cogeneration programs. Cogeneration is the making of electricity and heat together. Many plants that make steam for heating and industrial processes can cogenerate electricity by first running the steam through turbines. Table 6 in the appendix lists those industries which are energy or nonenergy intensive.

Despite some adverse factors, such as energy costs, most available evidence indicates that the Fitchburg-Leominster labor market area will maintain its economic strength and continue to produce industrial growth in 1982. Following is a breakdown of employment outlooks by specific industry:

B. Manufacturing

Manufacturing employment represented a very strong 47.6 percent of local employment in 1980. This is an unusually large share for the manufacturing sector. There was an increase of 400 manufacturing jobs between 1979 and 1980, and growth is expected to continue at a slightly slower pace through 1982. Employment in firms producing durable goods went up 500 positions between 1979 and 1980 while 100 jobs were lost in the nondurable goods sector. Jobs will continue to increase in durable goods establishments while makers of nondurables are expected to turn around and start showing increases through 1982.

1. Primary Metals

Employment in the primary metals industry increased by 50 percent between 1975 and 1980. However, it has remained level since 1979 and there are some expectations for this trend to continue. Primary metals have become highly automated and capital intensive as an industry. As a result, its performance during the recent recession was greatly improved compared to the 1974-1975 recession. Companies involved in the drawing and insulating of nonferrous wire are looking forward to increases in both production and employment in 1982. As much as 70 percent of their business is done with high technology companies which are continually opening new markets through product innovations. Furthermore, their secondary market is made up of communications and burglar and fire alarm companies which are supplying a consumer market that is becoming increasingly conscious of property protection. One manufacturer feels that an employment growth rate of 30 percent is attainable by the end of 1982.

Employment in the manufacturing of iron and steel castings has been stable since 1979 and most local employers expect this stability to continue indefinitely. The primary metals industry should remain stable for the remainder of 1981 and begin to show increases in employment during 1982. Local manufacturers of wire and cable are experiencing difficulty in recruiting engineers and production workers, while iron and steel foundries are continually looking for molding and core makers.

2. Fabricated Metals

Fabricated metals is a solid industry in the Fitchburg-Leominster labor market area. Employment has been virtually unaltered in recent years. Local manufacturers are primarily engaged in fabricated structural metal and fabricated plate work. This is a labor intensive industry in which required skills take a great deal of time to learn. Production line methods or automation are not often applicable because it is generally not economically feasible to install labor-saving-special purpose equipment.

The industry is made up, mostly, of small enterprises for which capital costs of such equipment are often prohibitive. The fabricated metals industry is essentially local in nature. It does not have national markets because of the relatively high freight charges involved in shipping the finished product. Employment has remained stable in 1981 and there are no indications of change for 1982.

3. Nonelectrical Machinery

The nonelectrical machinery industry has continued to be one of the area's largest industries. In 1980, this major industry group accounted for 12 percent of all the nonagricultural employment in the area. Furthermore, it was responsible for 25 percent of all manufacturing employment and 61 percent of employment in durable goods manufacturing. In the Fitchburg-Leominster labor market area, this industry includes makers of engines and turbines, metal working machinery, special industries' machinery and office and computing machinery. The industry proved to be extremely resistant to the recession in 1980, maintaining firm employment levels. Establishments commonly known as contract tool and die shops were very stable in 1980 and have continued to be steady in 1981. Likewise, manufacturers of special industries' machinery (including textile and paper industries' machinery) have not experienced any instability. Establishments engaged in the manufacturing of both tools and dies, and special industries' machinery should experience continued stability through 1982. Makers of office and computing equipment may be the only ones affected by the recent recession. While employment did not fluctuate in 1980, it did level off following a growth period in 1979. Early indicators for 1981, reflect a return to growth which should remain steady. In summary, this industry will continue its durability and position as one of the area's largest industries.

4. Furniture and Fixtures

Local establishments included in this industry are primarily engaged in the manufacturing of household furniture such as upholstered products, casegoods and wood cabinets (for television sets, radios and phonographs). Employment has decreased at a rate of 20 percent since 1979 and is expected to continue in this direction. The furniture industry was hard hit by the recession in 1980. High home mortgage rates, decreased purchasing power and lack of new home construction combined to diminish sales and slacken production. Business conditions are equivalent to the situation following the 1974-1975 recession when employment never rebounded to its prior levels. Due to the continuing slump in new housing construction, employment in the furniture industry is not expected to return to the peak level of 1979. A major concern to local area manufacturers is the availability of certain labor. Despite the continuing slump, there is and will be a need for upholsterers, stitchers and cutters. Employers will have difficulty filling these openings because younger people have shown little interest in entering these occupations.

5. Lumber

Similar to the furniture industry, lumber has proven to be a recession-prone industry. Following continued growth in the late seventies, employment began to drop off during the 1980 recession. During the growth period, mills were concentrating on hardwood production as opposed to soft wood in order to service the needs of local furniture manufacturers. When the furniture orders stopped coming mill operators found themselves with an excessive inventory of hardwood. This resulted in reduced production capacities and some mill closings. The performance of this industry is also directly related to the deflated construction industry. As a result, employment should continue to drop off. If there is any hiring activity at all, it will, most likely, be made up of call backs and replacements.

6. All Other Durables

The "all other durables" category is made up of five major industry groups: petroleum; stone, clay and glass; electrical machinery; transportation equipment, and scientific instruments. In 1980, scientific instruments accounted for 73 percent of the all other employment. One of the area's largest employers is classified in this category and has experienced some recent layoffs. Therefore, employment should remain the same or drop slightly. Stone, clay and glass manufacturers were responsible for 16 percent of all other durable goods employment in 1980. The employment level rose 32 percent during the year but has leveled off in 1981. As a whole, the all other durable goods sector should experience steady employment in 1982.

7. Rubber and Plastics

The plastics industry has, traditionally, been very susceptible to recessions. It was paralyzed in 1974 and 1975. However, this was not true during 1980, as local manufacturers held their own. Employment rose 18 percent between March, 1979 and March,1980 and then leveled off, showing a decrease of 8 percent for the next year. During the remainder of 1981, it began to rise again. Plastics has long been considered the economic backbone of the Fitchburg-Leominster labor market area. This is supported by its 11 percent share of the total employment in the area and 24 percent share of all manufacturing employment. In addition, almost 14 percent of statewide employment in the plastics industry is located in the local area. Most local operations fabricate miscellaneous finished plastic products or mold primary plastics. A few establishments in this industry group are engaged in manufacturing industrial and mechanical rubber goods. Nevertheless, 94 percent of employment in this group is concentrated in plastics. Indications are that the performance of this industry should go upward in 1982 and result in some real growth. Several potential new employers and established firms have received MIFA financing (see Table 10) to either locate or expand in the area. Expenditures for new facilities and equipment should be substantial. Consequently, employment levels should continue to rise. Overall, prospects are very favorable and the industry should grow at a healthy pace in 1982.

8. Paper and Allied Products

Employment in the local paper industry accounts for almost 7 percent of the statewide industry employment. In the Fitchburg-Leominster labor market area, the paper industry was responsible for more than 11 percent of all manufacturing employment and 6 percent of total non-agricultural employment. Locally, manufacturers of paper and folding boxes account for 80 percent of the industry employment with firms involved with converted paper products making up the rest. The paper manufacturers face specific problems not commonly experienced nationally. Because raw materials are not located nearby, companies are absorbing accelerated prices for bringing materials in. As a result, energy costs have been far in excess of labor costs. In contrast, paper box makers seem to have an adequate supply of box-making material. Historically, the paper industry is a solid performer. It is characterized as capital intensive and technologically advanced. Locally, employment decreased 5 percent during 1980 and has leveled off in 1981. Productivity growth has been slow for the last couple of years. This has been attributed to a slow rate of creation of new capacity. It does not appear that significant new capacity will be added, so employment should

remain about the same. The mills are expected to perform satisfactorily, producing at close to 100 percent capacity. Paperbox manufacturers have made significant improvements in all stages of the manufacturing process in a continuous effort to increase productivity. Innovations include improved wrapping and packaging equipment, more automated machinery to eliminate steps in production runs, the use of curable inks and greater use of offset lithography. Normally, this would indicate, at the least, a slight decline in employment. However, employment should show an increase in the coming year, as a major manufacturer will be relocating in the area, providing many new jobs.

9. Apparel and Allied Products

The apparel industry is composed of many different types of manufacturers facing various cyclical patterns and subject to numerous pressures in terms of demographic patterns, styles and fashions and consumer interests. Locally, manufacturers are involved in the making of mens' and boys' trousers, women's and misses' outerwear and undergarments, miscellaneous apparel and miscellaneous fabricated products. The industry is highly labor intensive and provides entry level employment for the less skilled. Capital investment has increased some going into technologically advanced equipment. Despite this, short nonstandard runs remain customary for the industry because of seasonal and style changes. As a result, the industry will remain labor intensive. Local employment has shown slight gains since 1978, as new, but small companies have opened. This trend is expected to continue through 1982.

10. Textiles

The textile industry has become one of the smallest industries in the area, showing a job loss of 53 percent since 1976. Employment leveled off in 1980 and has continued to stabilize in 1981. Locally, employers classified in this industry are involved in spinning wool yarn for carpets and rugs or recovering textile fibers and processing waste. Nationally, a growth stimulus is predicted for the 1980's and local employment should continue to remain stable.

11. Printing and Publishing

The printing and publishing industry enjoyed a steady growth in employment between 1970 and 1979, with an increase of almost 160 percent. Nationally, the 1970's saw the entry of sophisticated technology and integrated systems while traditional production functions in pressrooms and composing rooms disappeared. As equipment manufacturers developed new technologies and manufacturers adopted them the need for production workers began to diminish. Locally, this trend did not begin to show until 1979 when employment fell off by 13 percent. Newspaper circulation has not kept up with population growth. Revenues from advertising aided publishers profits. However, competition for local advertising is expected to increase over the next few years as cable and pay television strengthen their positions in local markets. The commercial printing group is made of many small establishments using lithography as the dominant process. Thirty percent of the work done is in general job printing. Nationally, business forms manufacturing recorded one of the best years in its history. However, only 3 percent of local employment is involved in this industry. Despite the labor saving technological changes in printing methods and automation of layout through word processing and computerized graphics, local employers do not foresee any drastic cutbacks in employment. Following a slight decrease in 1981, employment should level off in 1982.

12. Chemicals

Manufacturers of plastics material and synthetic resins make up 93 percent of the chemical industry in the labor market area. Employment was very stable from 1977 through 1980. Stability should continue in 1981 while 1982 may show some decreases. The production of plastics material or synthetic resins depends on having reliable supplies of the basic raw materials- petroleum and natural gas. Local employers report an abundance of these materials - but at much higher prices.

Despite sharply increasing costs of raw materials, which will raise plastic and resin prices, real growth is expected in 1982. Development will be maintained by the cost advantages of plastics and performance and life cycle advantages in numerous product applications. Growth in plastics consumption will continue, but the rate will depend on interest rates. One local manufacturer feels that the gain could be as much as 20 percent in 1982 if interest rates come down.

Any increases in production will not, necessarily, create new employment. However, employment levels should remain steady through 1982.

13. All Other Nondurables

This group is comprised of makers of miscellaneous products (49 percent), leather (35 percent) and food (16 percent). Local manufacturers of miscellaneous products are primarily involved in making dolls, games and toys, and brushes. Employment within this group has not varied during the last few years. Slower consumer spending, brought on by credit restraints, has affected makers of games and toys moderately. The leather industry has been affected by its need for imports and the price of oil based raw materials. However, local establishments have maintained their employment levels and expect to do so in 1982.

C. Nonmanufacturing

Nonmanufacturing employment grew by an astounding 39.8 percent between 1979 and 1980, with the big gains occurring in the construction and service-oriented industries. Jobs in nonmanufacturing companies will continue to increase, but at a diminished pace.

1. Construction

Local area employment increased about 17 percent in this industry during 1980. Since 1975, employment has risen 55 percent. Despite severe setbacks in residential construction, caused by a sluggish economy and high mortgage interest rates, this industry has performed remarkably well in the labor market area. This success is attributed to one key factor - the financing programs are administered by the Massachusetts Industrial Finance Agency. As a result of these programs, numerous building projects have been started, which have offset the decline in housing starts. In the Leominster Industrial Park alone, at least 5 MIFA related projects are underway. Both special trade and general contractors feel that only these projects have prevented employment losses. Housing markets in the 1980's are expected to benefit from a strong demand for owner-occupied units, as a result of rising incomes, inflation and the maturation of babies-born following World War II. Demand for other types of building construction is expected to follow the same trend, except for educational, religious and hospital buildings. Nevertheless, local firms feel that future performance will continue to be related to MIFA bond issues. Employment growth is expected to continue, though not at the rate experienced in the last few years. If state cutbacks in MIFA funding became a reality, there will be sharp losses in employment.

2. Transportation, Communications, Public Utilities

Employment in these industries has risen over 50 percent during the last decade. Transportation currently accounts for 51 percent of employment in this industry group. Communications and utilities share 29 and 20 percent respectively. The major addition of a commuter train between the region and Boston has contributed to this growth. Although there is much concern over the continued existence of this rail service, funding should be provided through June 30, 1982. As a result of the improved construction industry, aided by MIFA bonding, there could be increases in the need for communications and public utilities in the 1980's. Employment growth leveled off between 1979 and 1980 and has continued to remain stable in 1981. It is expected that this stabilizing trend will continue in 1982.

3. Wholesale and Retail Trade

In the Fitchburg-Leominster labor market area, 94 percent of employment in this group is concentrated at the retail level. Nationally, the combination of recession, continuing inflation, and tight money during 1980 contributed to a rather bleak retail picture. However, local retailers have held their own. Employment went up slightly between 1979 and 1980 and has not dropped since. Retailers forecasted even sales for 1980 and actually realized increases of up to 2 percent. Gross sales for 1981 could increase anywhere from 2 to 5 percent. This does not mean increased employment. The established stores are looking for reductions in employment during 1982. However, this will be offset by new employment being created by the opening of several new stores. Overall, employment in local stores should increase in 1982. Adversely, there has been a continued attrition of career employees and local employment is now made up of as much as 65 percent part-timers, and this trend is expected to go on.

Despite the creation of new employment and a net increase in the employment level, there will be little career opportunity or mobility in the retail industry.

4. Finance, Insurance, Real Estate

This industry group has seen a 44 percent increase in employment since 1970. However, employment has not varied in the last three years. Banking is responsible for 39 percent of local employment while credit agencies and insurance account for 29 and 27 percent respectively.

Savings banks have seen a dramatic change between their regular deposits versus deposits having a set maturity, most notably money market certificates. Home mortagages, loans for durable goods and for home improvement have continued to remain as low as interest rates are high. It is hoped that the stable performance of local area employment and the prospect of future increases will augment demand for banking services. Bankers feel that high interest rates will begin to come down in 1982 and this will further stimulate a need for more services. Real estate has done well, specifically for those companies dealing with commercial properties. New companies are relocating and established firms are buying land and buildings for expansion. As mentioned in the section on construction, there are many building projects going on, especially in the industrial parks, as a result of MIFA bonding. Commercial developers predict continued prosperity for some time, as a solid labor market draws new industries to the area. The near completion of Interstate 190, coupled with the good labor market, has already influenced a high technology company to build in the area. It is hoped that more manufacturing companies will follow, On the other hand, residential development has been stagnant as a result of high interest rates for home mortgages and increased construction costs for both materials and labor. There is little hope that this situation will change before the end of 1982. Employment in finance, insurance and real estate is not expected to vary during 1982.

5. Miscellaneous Services

This is a sundry group of services in which employment has grown by more than 20 percent since 1975. The bulk of employment is located in health services, which has 52 percent of service employment and social services, which accounts for 13 percent. The balance of jobs is spread over many smaller areas ranging from personal to business services. The services industry has been a major factor in the ability of the Fitchburg-Leominster labor market to increase employment during the recent recession. Employment has grown slightly in 1981 and there should be some gains in 1982. Nevertheless, growth in jobs will occur at a slower pace than the rate of 1979 and 1980.

6. Government

Employment in the government sector was excluded from Table 6 because the 1981 and 1982 projections for private industry employment were, primarily, based on historical patterns. Any projections for government employment, based on the same methods would, most likely, be unsound. Government employment at all levels, federal, state, and local is expected to decline in 1982.

Table 8
Montachusett Employment and Training Program
CETA Subgrantee Area
1979 Covered Employment

	Total Employment	Agri-culture Fishing Forestry	Mining	Construction	Manu-facturing	Transp. Comm. Utilities	Wholesale Retail Trade	Finance Insurance Real Estate	Services
TOTAL CETA AREA	59906	459	16	2002	29236	2324	12916	1796	11157
Ashburnham	577	1	0	27	179	21	124	7	218
Ashby	67	0	3	19	14	8	17	0	6
Ayer	2060	3	0	23	352	225	611	57	789
Barre	563	0	0	27	233	19	209	23	52
Berlin	208	26	0	21	14	0	73	0	74
Bolton	744	3	0	61	489	11	102	3	75
Clinton	4863	0	0	125	3203	134	658	117	626
Fitchburg	15700	42	0	569	6195	718	3866	829	3481
Gardner	8297	4	0	153	4878	338	1319	243	1362
Groton	1189	44	0	27	380	36	185	22	495
Hardwick	524	6	0	10	293	17	62	0	136
Harvard	429	68	0	12	148	1	120	9	71
Hubbardston	137	0	0	3	83	22	16	2	11
Lancaster	1157	15	4	73	128	21	139	12	765
Leominster	13125	43	0	401	7359	475	2759	307	1781
Lunenburg	822	34	0	140	195	51	188	17	197
New Braintree	1	0	0	0	0	0	0	1	0
Oakham	31	0	0	20	0	8	0	0	3
Pepperell	868	3	0	60	448	5	188	32	132
Princeton	64	1	0	23	1	18	18	2	1
Shirley	940	4	0	26	533	1	329	17	30
Sterling	673	159	9	63	169	68	168	8	29
Templeton	999	0	0	25	675	41	117	7	134
Townsend	1546	1	0	31	538	33	856	12	75
Westminster	2576	0	0	41	1978	29	380	19	129
Winchendon	1746	2	0	22	751	24	412	50	485

Source: Employment and Wages Cities and Towns 1967-1979

Table 9
Fitchburg-Leominster SMSA
1979 Covered Employment

Area	Total Employment	Agri-culture Fishing Forestry	Mining	Construction	Manu-facturing	Transp. Comm. Utilities	Wholesale Retail Trade	Finance Insurance Real Estate	Services
TOTAL- Labor Market Area	34709	124	0	1208	16798	1307	8378	1201	5693
Fitchburg	15700	42	0	569	6195	718	3866	829	3481
Leominster	13125	43	0	401	7359	475	2759	307	1781
Lunenburg	822	34	0	140	195	51	188	17	197
Shirley	940	4	0	26	533	1	329	17	30
Townsend	1546	1	0	31	538	33	856	12	75
Westminster	2576	0	0	41	1978	29	380	19	129

Source: Employment and Wages Cities and Towns 1967-1979

D. Massachusetts Industrial Finance Agency (MIFA)

The Massachusetts Industrial Finance Agency was established to administer a variety of economic development financing programs to assist expanding businesses throughout Massachusetts. The goal of MIFA's incentives is to create more jobs and higher incomes by stimulating greater levels of investment by private employers. The agency was established by the state legislature to promote industrial and commercial growth by providing tax-free, low-interest loans and mortgage insurance. In order to qualify for these loans office buildings, retail establishments, parking garages, and other projects must be located in a Commercial Area Revitalization District (CARD) such as those in Fitchburg-Leominster. CARD districts are established at the local level and submitted to the Department of Community Affairs for approval. Once the district is created, commercial projects within that district can utilize various federal and state investment incentive programs, including MIFA tax-exempt bonds. The following is a list of industrial revenue bonds approved by MIFA in the Fitchburg-Leominster labor market area during 1979 and 1980.

Table 10
Massachusetts Industrial Finance Agency (MIFA)
Bond Approvals Through 12/31/80
Fitchburg-Leominster SMSA

Board Approval Date	SIC Code	Industry Title	Company	Location	Estimated Jobs Created
3/1/79	2752	Printing	Hale-Moore Printing	Fitchburg	23
6/27/79	2653	Paper Prod.	Star Container	Leominster	12
9/6/79	3079	Plastic Prod.	S.A.Y. Ind. Inc.	Leominster	10
10/4/79	3443	Fab. Metal	Steel-Fab. Inc.	Fitchburg	10
11/1/79	3079	Plastic Prod.	Plastican, Inc.	Leominster	25
12/6/79	2599	Furniture	Moduform Inc.	Fitchburg	25
12/6/79	3079	Plastic Prod.	Sanitoy, Inc.	Fitchburg	31
1/3/80	2294	Textiles	Vertipile, Inc.	Leominster	10
3/18/80	3079	Plastic Prod.	Bee Plastics Corp.	Fitchburg	140
4/3/80	3357	Primary Metal	Denardo Wire & Cable Co.	Fitchburg	15
4/3/80	2821	Chemicals	Gary Chemical Corp.	Leominster	23
5/1/80	3079	Plastic Prod.	Sloane Plastic Corp.	Fitchburg	33
6/5/80	INA	--	David Donahue	Fitchburg	218
8/7/80	3079	Plastic Prod.	Sterling Mfg. Co.	Lancaster	30
9/15/80	3079	Plastic Prod.	Lemor Plastics Corp.	Fitchburg	25
10/2/80	5161	Chemicals	Monson Chemicals Inc.	Leominster	8
11/13/80	2653	Paper Prod.	Premier Corr. Box, Inc.	Fitchburg	50
11/13/80	INA	--	Vincent & Colleen Campobasso	Leominster	112

E. Job Placement Data by Industry

Table 10, on page 85 of the appendix, provides a list of job openings received and filled at the Fitchburg Job Match Center. Openings received between October 1, 1980 and March 31, 1981 are listed by Industrial Division and Occupational Category. The manufacturing division accounted for 41 percent of the total openings received while service industries provided 24 percent of the openings.

Table 5, on page 78 of the appendix, provides a percent distribution of openings received during March, 1981, for selected industry groups. Once again, the manufacturing sector provided the majority of openings with 60.8 percent. Nondurable goods makers acccunted for 94.1 percent of these jobs. Service industries accounted for 14.4 percent of jobs received during the month. This table also provides a percentage distribution of openings that remained unfilled.

IV. Employment Developments and Outlook by Occupation

A. Introduction

The general application of Employment Service Automated Reporting Systems (ESARS) data to employment demands is limited. First, companies which obtain federal contracts are required to list all jobs with the employment service; it is not certain whether a job is truly in demand. Also, the local employment office receives a small percentage of the total job openings in the labor market area. Furthermore, a great number of job listings tend to be those which need to be filled on short notice usually clerical or low skilled. Furthermore, openings are usually for entry or mid-career positions; many positions at the top of the career ladder are filled through internal bidding. As a result, the ESARS data may skew a sample of occupational demands. Finally, unfilled openings are not always verified and it is not known whether they remain unfilled. While employment office data can provide a rough idea as to where the demands are and what the outlook is like, other sources, such as information from vocational schools, community colleges, and employers, must be analyzed in order to get a complete picture of the job market.

B. Trends in Occupational Demand

A comparision of ESARS data from March, 1980 and March, 1981 reveals that unfilled openings in service occupations rose 73 percent. Also, unfilled openings in machine trade occupations went up 48 percent and in clerical and sales occupations increased 38 percent. At the same time, in structural work (construction, metal fabrication etc.) they went down 74 percent, while in processing occupations they dipped 63 percent.

Table 11 shows unfilled openings as a percentage of total openings received between October 1, 1980 and March 31, 1981 This table reveals that the three largest occupational sectors, percentage wise, were agriculture, professional or technical, and benchwork.

Table 12 provides a listing of the top ten occupations which show an applicant surplus, while table 13 lists the top ten occupations reflecting a high demand.

In the appendix, Table 3A on page 76 , shows the distribution of occupations of unemployed persons, by sex and minority status in the Fitchburg-Leominster SMSA in 1979.

Table 11
Unfilled Job Openings By
Occupational Category
Fitchburg-Leominster SMSA
October 1, 1980-March 31, 1981

Major Occupational Category	Number Of Openings Received	Number Of Openings Unfilled	Percentage Of Openings Unfilled
Professional, Technical and Managerial	55	33	60.0
Clerical and Sales	318	77	24.2
Services	106	40	37.7
Farming, Fishing and Forestry	59	58	98.3
Processing	131	22	16.8
Machine Trades	89	30	33.7
Bench Work	74	41	55.4
Structural Work	70	23	32.9
Miscellaneous	187	26	13.9

Table 12

Applicant Surplus Occupations - Fitchburg-Leominster SMSA

1. Office Clerks
2. Heavy Truck Drivers
3. Tractor Trailer Drivers
4. Construction Workers
5. Material Handlers
6. Kitchen Helpers
7. Carpenters
8. Electronics Assemblers
9. Bookkeepers
10. Banktellers and Cashiers

Table 13

Demand Occupations - Fitchburg-Leominster SMSA

1. Electrical Engineers
2. Molding and Core Makers
3. Machinist
4. Tool Maker
5. Upholsterer
6. Furniture Stitcher
7. Furniture Cutter
8. Television and Radio Repair
9. Hand Finisher, Plastics
10. Sheet Metal Worker

C. Openings Received and Filled by Occupational Category and Hourly Wage Rate

ESARS Table B07 for March, 1981 on page 81 in the appendix is a summary of job openings received and filled by occupational category and hourly wage rate for the first six months of fiscal year 1981. The hourly wage range of $3.35 to $4.50 (columns F,G and H) accounted for 62 percent of both total openings received and filled. The only openings filled which averaged over $5.00 an hour were in the professional, technical, managerial and structural work areas.

D. Openings Received and Filled by Industrial Division and Occupational Category

ESARS Table 10 for March 1981 on page 85 in the appendix is a summary of job openings received and filled by occupational category and industrial divisions for the first six months of fiscal year 1981. The manufacturing sector provided 40 percent of all openings received and 46 percent of all openings filled. The services sector followed, accounting for 24 percent of openings received and 25 percent of openings filled.

E. Recession-Resistant and Recession Resilient Occupations

Table 14 shows vocational technical occupations within recession-resistant industries and Table 15 lists those occupations within recession-resilient industries.

F. Occupational Outlook

Information on the local occupational outlook was gathered from the vocational-education schools, community colleges, and local area employers. According to these sources, service-related occupations should attain the highest annual growth rates in the 1980's, reflecting continued expansion in the service-producing sectors. Health-related occupations show a very promising outlook, especially for registered nurses and respiratory technician/therapists. The greatest need should occur in the engineering occupations as local companies experience more difficulty in filling their openings. Specifically, the demand for electrical engineers will far exceed the supply. Software and systems engineers will also be needed as an increased number of high technology companies locate in the area. This influx will create increasing demands for computer programmers, operators, repairers and electronic technicians. Finally, if current trends continue, there will be rising demands for mold makers and hand finishers in the plastics industry, upholsterers and cutters in the furniture industry, and machinists and tool makers in the machine trades.

Table 14
Occupations in Recession-Resistant Industries
In The
Fitchburg-Leominster SMSA

3-Digit SIC Code	Recession-Resistant Industry	Vocational-Technical Occupations Within the Industry
275	Commercial Printing	Secretaries Computer Equipment Operators Bookkeepers Shipping/Receiving Clerks Compositors/Typesetters Photoengravers Lithographers Press and Plate Printers
596	Nonstore Retailers	Cooks Stock Clerks Sales Clerks Secretaries/Typists Bookkeepers Shipping/Receiving Clerks Mechanics and Repairers
541	Grocery Stores	Stock Clerks Sales Clerks
806	Hospitals	Engineering Technicians Electrical/electronics Technician Nurses Nursing Assistants Medical Laboratory Assistants Medical Laboratory Technicians X-ray Technicians Computer Programmers Secretaries/typists Receptionist Maintenace Mechanics, Repairers Food Workers Cooks
271	Newspapers, Publishing & Printing	Press and Plate Printers Photographers Secretaries, Typists, Stenographers Bookkeepers Accounting Clerks Typesetter/Compositor Electrotypers Lithographers
701	Hotels and Motels	Baker Cooks Maintenance Repairers Secretary Stock Clerk Receptionist
801	Offices of Physicians	Nurses Health Technicians Medical Laboratory Technicians Medical Laboratory Assistants X-ray Technicians Secretaries, Typists Office-machine Operators Bookkeepers File Clerks Receptionist Medical Insurance Clerk

Table 14
Occupations in Recession-Resistant Industries
In The
Fitchburg-Leominster SMSA
(continued)

3-Digit SIC Code	Recession-Resistant Industry	Vocational-Technical Occupations Within The Industry
554	Gasoline Stations	Automobile Body Repairers Automobile Mechanics
385	Manufacturer of Opthalmic Lenses and Sunglasses	Engineering/science technician Maintenance Mechanic Lens Grinder Machinist Tool and Die Maker Compression/Injector Molder Office-Machine Operator Secretary Shipping/receiving clerk
411	Local Passenger Transportation	Automobile Mechanic Diesel Mechanic General Clerk Secretary
239	Miscellaneous Fabricated Textiles	Maintenance Mechanic General Clerk Shipping/receiving clerk
769	Miscellaneous Repair Shops	Engineer Technicians Secretaries/Typists Bookkeepers Machinists Automobile Mechanics Mechanics, Repairers, Installers Electric Motors Repairers Musical Instrument Repairers
653	Real Estate	Bookkeepers Receptionists General Clerks Real Estate Clerks Construction Workers Carpenters Painters Mechanics and Repairers
612	Savings and Loans	Teller Miscellaneous Clerical

Source: Division of Employment Security's 202 Reports of Nonagricultural Wage and Salary Industries.

Table 15
Occupations in Recession-Resilient Industries
In The
Fitchburg-Leominster SMSA

3-Digit SIC Code	Industry	Vocational-Technical Occupation Within The Industry
249	Miscellaneous Wood Products	General Machinists Wood Machinists Welders and Flame Cutters Painters
238	Miscellaneous Apparel and Accessories	Tailors
225	Knitting Mills	Bookkeepers Shipping/Receiving Clerks Heavy Equipment Mechanics Knitting Machine Repairers Mechanics, Repairers, Installers
265	Manufacture of paperboard containers and boxes	Secretaries Bookkeepers General Clerks Machinists Toolmakers and Diemakers Mechanics, Repairers, Installers Heavy Equipment Mechanics Construction Crafts Machine Setters
421	Trucking: Local and Long Distance	Automotive Mechanic Diesel Mechanic Bookkeeper Secretary Shipping/Receiving Clerks
641	Insurance Agents, Brokers, Service	Bookkeeping Stenographer Claims Clerk General Clerk Receptionist Secretary/Typist
289	Manufacture of Chemical Products	Engineering and Science Technicians Secretaries Bookkeepers Pipefitters/Plumbers Mechanics, Repairers, Installers Heavy Equipment Mechanics
553	Automobile and Home Supply	Bookkeepers Stock Clerks General Clerks Mechanics, Repairers, Installers Automotive Mechanics

Source: Division of Employment Security's 202 Reports of Nonagricultural Wage and Salary Industries.

V. Recent Unemployment Trends and Projections

A. Past Trends

Table 16 compares the annual average unemployment rates for the nation, state and local area from 1975 through 1980. Also, the monthly rates are listed for the first five months of 1981. As a result of the devastating 1974-1975 recession, the Fitchburg-Leominster SMSA experienced its highest unemployment rate of the decade in 1975, when the number of unemployed exceeded 7,000 in some months. Since the mid-decade recession, the unemployment rate dropped steadily, reaching a low of 4.9 percent in 1979. The 1980 annual average rate rose to 6.1 percent, indicating some reaction to the 1980 recession, but nowhere comparable to the effects of the 1974-1975 recession. The monthly rates for the first five months of 1981 indicate a certain stability, except for traditional and seasonal changes. However, the balance of 1981 should show some reduction in employment due to liquidated cuts in state and local government because of Proposition 2½. In addition, there will be cutbacks in federal agency staffing beginning in October, the start of the federal fiscal year. Table 5 , Population and Labor Force Composition Projections, on page 13 , projects an unemployment rate of 6.4 percent for 1982. More recent information and data suggest that the projection may be lowered one or two-tenths of a percentage point, with a monthly high of 8.0 percent occurring in June.

Since the 1974-1975 recession, the SMSA's comparative position with the state and nation has vastly improved. During the mid-decade recession, local area performance was much worse than both the state and nation. As the decade came to a close, the local area unemployment rate was actually lower than both the state and nation. The initial response to the 1980 recession, placed the local area slightly higher than the state, but far below the nation, in unemployment rate. All indications are that, during the latest economic slowdown, the Fitchburg-Leominster SMSA has held its own with the state and performed much better than the nation. Much of the national slowdown has been attributed to the slumping auto industry and depressed housing market. Fortunately, the local economy is not heavily dependent on either of these industries.

Setion III, Employment Developments and Outlook by Industry, provides a much closer look at the area's performance over recent years.

Table 16
Employment Statistics
1975-1980
Fitchburg-Leominster SMSA, Massachusetts, United States

Period	(in 000's)			Unemployment Rate		
	Labor Force	Employment	Unemployment	LMA	Mass.	U. S.
1975	48.1	41.6	6.5	13.5	11.2	8.5
1976	48.5	43.6	4.9	10.1	9.5	7.7
1977	46.9	43.0	3.9	8.2	8.1	7.0
1978	49.0	46.2	2.8	5.7	6.1	6.0
1979	49.0	46.6	2.4	4.9	5.5	5.8
1980	48.1	45.1	3.0	6.1	5.6	7.1
January	47.7	44.4	3.3	6.8	6.5	6.8
February	47.4	44.5	2.9	6.0	5.8	6.8
March	47.7	45.1	2.6	5.3	5.3	6.6
April	47.1	44.7	2.4	5.1	5.0	6.6
May	47.8	44.8	3.0	6.2	5.8	7.0
June	48.1	44.2	3.9	8.1	6.6	7.8
July	48.3	44.7	3.6	7.4	6.1	7.9
August	48.9	45.7	3.2	6.6	6.0	7.5
September	47.9	44.9	3.0	6.3	5.9	7.1
October	49.0	46.0	3.0	6.1	5.6	7.1
November	48.4	46.2	2.2	4.6	4.6	7.1
December	48.3	46.0	2.3	4.7	4.4	6.9
1981						
January	47.4	44.4	3.0	6.2	6.4	8.2
February	48.1	45.0	3.1	6.4	6.4	8.0
March	48.5	45.5	3.0	6.2	6.2	7.7
April	46.8	44.2	2.6	5.5	5.2	7.0
May	47.0	44.2	2.8	5.9	5.7	7.1

B. Characteristics of Insured Unemployed

Tables 17-19 reflect the characteristics of the insured unemployed in the Fitchburg-Leominster SMSA, Fitchburg Job Insurance Center, and CETA subgrantee area respectively, during March, 1981. The white unemployed made up 95 percent of the total claims in the SMSA, 94.9 percent of claims in the local job insurance center, and 96.1 percent of all claims in the CETA area. Also, it is evident that the bulk of nonwhite claimants are located in the twin cities area.

Table 20 shows that 1.6 percent of the total nonagricultural employment in 1980 was estimated as employed part-time for economic reasons. It is projected that the same percentage will hold true in 1981 and 1982.

C. Labor Force, Employment and Unemployment by Cities and Towns

Table 21 lists the 1979 and 1980 annual average labor force, employment, unemployment and unemployment rate for the Fitchburg-Leominster SMSA. This table shows that the town of Shirley had the highest unemployment rate in the labor market for both years. Naturally, the number of unemployed were concentrated in the cities. Tables 22 and 23 provide the 1980 annual averages for the local job match center area of service and the CETA area respectively. The town of Harvard had the highest unemployment rate in the job match area while Hardwick headed the CETA area.

D. Unemployment Insurance Claims Activity

A review of claims activity in the labor market area is provided in Table 24 . It covers 1979 and 1980. In addition, it provides data for the first five months of 1981. With the exception of seasonal changes and the slight effect of the 1980 recession, there was very little fluctuation in claims activity. Also, to be noted, is a steady decline in continued claims for the first five months of 1981.

Table 17
Characteristics of Insured Unemployed
By Place of Residence and Race
Fitchburg-Leominster SMSA
March,1981

Labor Market Area	White	Nonwhite	Spanish Surname	Other	Not Coded	Total Claims
TOTAL	1,105	15	24	12	2	1,158
Fitchburg	502	7	13	2	2	526
Leominster	361	2	11	8	0	382
Lunenburg	72	0	0	0	0	72
Shirley	34	5	0	1	0	40
Townsend	63	1	0	1	0	65
Westminster	73	0	0	0	0	73

Source: RS-064 LRPR March, 1981

Table 18
Characteristics of Insured Unemployed
By Residence and Race
Fitchburg Job Insurance Center
March, 1981

Labor Market Area	White	Nonwhite	Spanish Surname	Other	Not Coded	Total Claims
TOTAL	1,221	21	25	17	2	1,286
Ashby	19	0	1	0	0	20
Ayer	68	6	0	4	0	78
Boxborough	17	0	0	1	0	18
Fitchburg	502	7	13	2	2	526
Groton	27	0	0	0	0	27
Harvard	8	0	0	0	0	8
Leominster	361	2	11	8	0	382
Lunenburg	72	0	0	0	0	72
Pepperell	50	0	0	0	0	50
Shirley	34	5	0	1	0	40
Townsend	63	1	0	1	0	65

Source: RS-064 LRPR March, 1981

Table 19
Characteristics of Insured Unemployed By
CETA Subgrantee Residence and Race
Montachusett Employment and Training Program
March, 1981

CETA Service Area	White	Nonwhite	Spanish Surname	Other	Not Coded	Total Claims
TOTAL	2,192	24	32	28	5	2,281
Ashburnham	41	0	0	0	0	41
Ashby	19	0	1	0	0	20
Ayer	68	6	0	4	0	78
Barre	62	0	0	0	0	62
Berlin	27	0	0	1	0	28
Bolton	21	0	0	0	0	21
Clinton	185	2	4	2	0	193
Fitchburg	502	7	13	2	2	526
Gardner	215	0	0	2	0	217
Groton	27	0	0	0	0	27
Hardwick	41	0	0	1	0	42
Harvard	8	0	0	0	0	8
Hubbardston	25	0	0	1	0	26
Lancaster	46	0	2	1	1	49
Leominster	361	2	11	8	0	382
Lunenburg	72	0	0	0	0	72
New Braintree	9	0	1	1	0	11
Oakham	16	0	0	1	0	17
Pepperell	50	0	0	0	0	50
Princeton	21	0	0	0	1	22
Shirley	34	5	0	1	0	40
Sterling	48	1	0	0	0	49
Templeton	67	0	0	1	0	68
Townsend	63	1	0	1	0	65
Westminster	73	0	0	0	0	73
Winchendon	91	0	0	2	1	94

Source: RS-064 LRPR March, 1981

Table 20
Estimates of Workers Employed
Part-time For Economic Reasons
Fitchburg-Leominster SMSA
1979-1982
(in 000's)

Year	Nonagricultural Wage and Salary Employment	Estimated Employment Part-time For Economic Reasons
1979	33.8	1.5
1980	34.9	1.6
1981	35.5	1.6
1982	36.3	1.6

Table 21
1979 and 1980 Annual Averages
Labor Force, Employed and Unemployed
Fitchburg-Leominster SMSA

	Annual Average Labor Force		Annual Average Employment		Annual Average Unemployment		Annual Average Unemployment Rate	
	1979	1980	1979	1980	1979	1980	1979	1980
Labor Market Area	49,013	48,048	46,617	45,113	2,396	2,935	5.0	6.1
Fitchburg	21,832	21,432	20,650	19,984	1,182	1,448	5.4	6.8
Leominster	16,836	16,471	16,143	15,622	693	849	4.1	5.2
Lunenburg	3,792	3,724	3,582	3,467	210	257	5.5	6.9
Shirley	2,050	2,018	1,920	1,858	130	160	6.3	7.9
Townsend	2,292	2,242	2,196	2,125	96	117	4.2	5.2
Westminster	2,211	2,161	2,126	2,057	85	104	3.8	4.8

Table 22
1980 Annual Averages
Labor Force, Employment and Unemployment
Fitchburg Job Matching Center Area of Service

	Annual Average Labor Force	Average Annual Employment	Average Annual Unemployment	Annual Average Unemployment Rate
Area of Service	56,808	53,193	3,615	6.4
Ashby	983	909	74	7.5
Ayer	2,956	2,737	219	7.4
Fitchburg	21,432	19,984	1,448	6.8
Groton	2,476	2,299	177	7.1
Harvard	1,877	1,720	157	8.4
Leominster	16,471	15,622	849	5.2
Lunenburg	3,724	3,467	257	6.9
Pepperell	2,629	2,472	157	6.0
Shirley	2,018	1,858	160	7.9
Townsend	2,242	2,125	117	5.2

Table 23
1980 Annual Averages
Labor Force, Employment & Unemployment
Montachusett Employment & Training Program

	Annual Average Labor Force	Annual Average Employment	Annual Average Unemployment	Annual Average Unemployment Rate
Total CETA Area	97,106	91,181	5,925	6.1
Ashburnham	1,708	1,609	99	5.8
Ashby	983	909	74	7.5
Ayer	2,956	2,737	219	7.4
Barre	1,699	1,595	104	6.1
Berlin	1,125	1,069	56	5.0
Bolton	1,607	1,558	49	3.0
Clinton	6,605	6,237	368	5.6
Fitchburg	21,432	19,984	1,448	6.8
Gardner	10,648	9,931	717	6.7
Groton	2,476	2,299	177	7.1
Hardwick	1,016	883	133	13.1
Harvard	1,877	1,720	157	8.4
Hubbardston	614	591	23	3.7
Lancaster	3,081	2,885	196	6.4
Leominster	16,471	15,622	849	5.2
Lunenburg	3,724	3,467	257	6.9
New Braintree	274	258	16	5.8
Oakham	282	266	16	5.7
Pepperell	2,629	2,472	157	6.0
Princeton	814	775	39	4.8
Shirley	2,018	1,858	160	7.9
Sterling	2,280	2,198	82	3.6
Templeton	2,952	2,835	117	4.0
Townsend	2,242	2,125	117	5.2
Westminster	2,161	2,057	104	4.8
Winchendon	3,432	3,241	191	5.6

Table 24
Unemployment Insurance (UI) Claims Activity
Fitchburg-Leominster SMSA

Date	UI Continued Claimants	UI Continued Claimants Less Earnings	UI Initial Claims
1979			
January	1660	1547	242
February	1679	1538	218
March	1481	1367	124
April	1096	985	207
May	864	798	112
June	941	825	260
July	1384	1331	165
August	1163	1080	202
September	965	885	139
October	892	814	166
November	1042	929	236
December	1269	1172	293
1980			
January	1699	1565	179
February	1628	1509	183
March	1496	1404	120
April	1309	1198	179
May	1318	1214	226
June	1571	1463	352
July	1982	1891	281
August	1600	1497	189
September	1259	1161	132
October	1162	1073	210
November	1690	1031	183
December	1369	1199	366
1981			
January	1585	1486	128
February	1537	1446	180
March	1416	1341	168
April	1225	1130	243
May	1085	986	188

VI. Labor Supply-Demand Imbalances

The Employment Service Automated Reporting System (ESARS) showed 2,577 active applicants and 350 unfilled openings on file in the Fitchburg Job Matching Center as of March 31, 1981 (see Table 96 in appendix).

By comparing the number of active applicants with the number of unfilled openings, we find that for every unfilled opening there were 7.4 applicants still looking for work. Table 25 offers ratios of applicants to job openings in selected occupations for the labor market area. These ratios are also drawn from ESARS Table 96. While these ratios are useful in analyzing occupational supply and demand, several restrictions must be considered. First, those who fill out job applications at the job match center may not be well qualified for the occupation they list; many applicants misjudge their qualifications or incorrectly define their occupations. Also, many people who are required to register at the job match center (claimants, welfare receipients, etc.) may not represent a serious supply of labor. The limitations in the job opening data is discussed in the introduction to Section IV.

Despite these restrictions, certain guidelines can be drawn. An occupation with a ratio of greater than 3 to 1 should be considered as one with a surplus of applicants. Any occupation whose ratio consistently remains below 3 to 1 can be considered one for which local employers are having difficulty finding workers. Any review of the ratio table should include consideration of the data sources limitations.

Table 12 , Applicant Surplus, and Table 13 , Demand Occupations, on page 36 , provide a ready look at the major imbalances in the Fitchburg-Leominster SMSA.

Finally, Table 26 is a comparative list of employment service openings and average pay in the ten major labor market areas as of March, 1981. The Fitchburg-Leominster labor area had the second lowest average pay among the ten areas. Also, this average pay was more than 10 percent below the state average. Once again, consideration must be given to the fact that a tremendous number of job openings are never received by the job match center.

Table 25
Ratio of Applicants to Job Openings
Selected Occupations
Fitchburg-Leominster SMSA
October 1, 1980-March 31, 1981

2-Digit DOT Code	Occupation	Cumulative Active Applicants	Total Openings Received	Ratio Of Applicants To Openings
	Professional, Technical and Managerial Occupations			
07	Medicine & Health	24	3	8/1
09	Education	12	0	--
16	Administrative	15	1	15/1
18	Management	26	1	26/1
	Clerical & Sales Occupations			
20	Stenography, Typing	132	55	2.4/1
21	Computing: Account Recording	147	47	3.1/1
23	Information Distribution	13	6	2.2/1
24	Miscellaneous Clerical	11	4	2.8/1
27	Sales, Commodities	20	8	2.5/1
29	Miscellaneous Sales	20	17	1.2/1
	Services Occupations			
31	Food & Beverage Preparation	66	29	2.3/1
33	Barbering, Cosmetology	12	1	12/1
35	Misc. Personal Service	70	17	4.1/1
	Processing Occupations			
55	Chemical Processing	77	71	1.1/1
	Machine Trade Occupations			
60	Metal Machining	16	8	2/1
62/63	Mechanics & Machinery Repairs	29	14	2.1/1
	Benchwork Occupations			
72	Electrical Equipment	28	7	4/1
73	Fabrication, Assorted Materials	30	24	1.3/1
78	Textile, Leather and Assembly	17	3	5.7/1
	Structural Work Occupations			
82	Electrical Assembling	12	5	2.4/1
84	Painting and Plastering	13	0	--
86	Construction, n.e.c.	62	17	3.6/1
89	Structural Work, n.e.c.	15	5	3/1
	Miscellaneous Occupations			
90	Motor Freight	96	16	6/1
91	Transportation	20	13	1.5/1
92	Packaging	336	113	3/1

Source: ESARS Table 96 - March 31, 1981

--TOTAL ES JOB BANK OPENINGS AND AVERAGE PAY

TOTAL MASSACHUSETTS
APRIL 1981

STATE JOB BANK	OPENINGS AVAILABLE		OPENINGS UNFILLED		OPENINGS UNFILLED 30 DAYS	
	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY	TOTAL	AVERAGE PAY
MASSACHUSETTS	8,288	$ 9,747	6,656	$ 10,109	3,191	$ 10,135
BOSTON	3,293	10,466	2,890	10,705	1,237	10,592
FALL RIVER	154	8,512	122	8,679	47	8,958
FITCHB/LEOMIN	257	8,568	152	9,130	85	9,107
LAWREN/HAVRHL	207	9,134	157	9,532	111	9,363
LOWELL	234	10,345	173	10,843	129	11,516
NEW BEDFORD	265	10,129	192	9,963	72	9,604
PITTSFIELD	99	9,127	68	9,656	51	9,796
SPNG/CHC/HOLY	819	9,729	740	9,838	343	10,669
WORCESTER	683	9,269	497	9,913	331	9,436
BALANCE-STATE	2,277	9,026	1,665	9,436	785	9,582

VII. Individuals In Need of Employment Services

One method of targeting those individuals in need of manpower services is to examine the segments of the population which have the highest unemployment rates. These individuals will, most likely, require the most services in order to prepare for local area jobs. Table 5, Population and Labor Force Composition Projections, on Page 13, includes projected unemployment rates for various segments of the local population.

Groups which are in excess of 10 percent estimated unemployment are black males, other females, and nonwhite females. These groups account for a very small percentage of the total labor force, making it much easier to provide the necessary services.

Another method of determining the local area needs for manpower service is to examine the percentage of registered applicants at the local job match center who are placed in jobs. Table 27 lists the active applicants and placements by demographic segment. Groups with lower placements rates will, generally, require more services. It is no surprise that the economically disadvantaged have the lowest placement rate.

Generally speaking, individuals in need of employment services have few, if any, marketable skills. The economically disadvantaged find themselves even further disadvantaged in the competitive job seeking arena. Other groups with a significant need of service are veterans, handicapped, minorities, women, and older workers.

Table 28, drawn from ESARS data, shows the characteristics of applicants who were registered with the Fitchburg Job Matching Center as of March 31, 1981.

Table 27
Percentage of Active Applicants Placed
By Demographic Segments
Fitchburg-Leominster SMSA
October 1, 1980-March 31, 1981

Demographic Segment	Active Applicants	Applicants Placed	Percentage of Applicants Placed
TOTAL	6508	631	10.0
Female	3071	271	8.8
Economically Disadvantaged	1503	73	4.9
Minority Groups	502	33	6.6
Black	196	14	7.1
Other	30	1	3.3
Hispanic	276	18	6.5
Handicapped	304	29	9.5
Veterans	1101	132	12.0
Vietnam Era	429	48	11.2
Disabled	50	6	12.0
Under 22	1429	164	11.5
45 and Older	1037	77	7.4

Source: ESARS Table 91, March, 1981

Table 28
Characteristics of Registered Applicants
Fitchburg Job Match Center
March 31, 1981

Characteristics	Registered Applicants	Percent Of Total
TOTAL APPLICANTS	3,892	100.0
Male	2,227	57.2
Female	1,665	42.8
White	3,637	93.4
Black	104	2.7
Hispanic	135	3.5
Other	16	0.4
Youth (15 & under)	8	0.2
Veterans	644	16.5
Handicapped	175	4.5
Eligible Claimants	1,546	39.7

Source: ESARS Table 06 - March 31, 1981

VIII. Training Programs - March 1981

A. Comprehensive Employment and Training Act (CETA)

The Comprehensive Employment and Training Act of 1973 (CETA) was passed with the purpose of providing job training and employment opportunities for economically disadvantaged, unemployed and underemployed persons; and to ensure that training and other services lead to maximum employment opportunities. Under CETA, the primary responsibility for manpower training is with the prime sponsors, which are cities with a population of 100,000 or more, and with consortiums (or subgrantees), which are groups of smaller cities and towns. The subgrantee responsible for the delivery of CETA services to the Fitchburg-Leominster SMSA is the city of Fitchburg, presently contracting with the Montachusett Employment and Training Program, Inc., Gardner, to provide job training and employment opportunities.

Severe funding cuts in Titles IID and VI, which provide public service employment to qualified participants in local nonprofit agencies and municipalities, forced a layoff of approximately 150 people in the spring of 1981. These titles will not be funded in Fiscal Year 1982, reducing the administrative capacity of METP.

Other than allocations for Title IIB and IV YETP, the only funds available for CETA eligible participants in Fiscal Year 1982 may come from the Governor's Discretionary Grants or the Title VII program, which works directly with private sector employers to provide job opportunities to participants. However, the additional funds possible from these two sources could never offset the effects of the basic funding cuts.

Planning estimated for the Montachusett Employment and Training Program are presented in Table 29 . Comparing Fiscal Years 1981 and 1982, it is evident that Titles IID and VI have been eliminated. Title IIB is estimated at 90 percent of last year's allocation, and IV YETP at 100 percent. Funding for youth programs appears to be the only area which will not be reduced in the next fiscal year. The budget for Fiscal Year 1982 is 51 percent of the total available for Fiscal Year 1981.

Table 29
Planning Estimates
Montachusett Employment and Training Program
City of Fitchburg as Subgrantee
Fiscal Year 1982

Program	Percent Of FY 1981 Base Allocation	Base Allocation FY 1981 (in Dollars)	Planning Estimates FY 1982
Title IIB	90.0	1,478,221	1,330,398
Title IV YETP	100.0	380,730	380,730
Title IID	0.0	1,047,428	0
Title VI	0.0	431,961	0
		3,338,330	1,711,128

Table 30
Classroom Training
Participants Served Through May 31, 1981
Montachusett Employment and Training Program

Course Title	Participants	Percent Of Total Participants
Computer Test Technician	52	23.0
Business Program (Clerical)	46	20.4
Computer Operator (including Data Entry)	36	15.9
Adult Basic Education (GED)	47	20.8
English as a Second Language	29	12.8
Individual Referrals (to other Training Institutions)	16	7.1
Total Participants	226	100.0

B. Work Incentive Program (WIN)

This program is administered by the Division of Employment Security and is funded primarily by the Federal Government. The program takes referrals from the Welfare Department, concentrating on welfare recipients covered by Aid to Families with Dependent Children (AFDC). The WIN program provides employment training and social services to welfare clients. Its goal is to move men, women and out-of-school youth, age 16 or older from the welfare rolls into meaningful, permanent employment. The Fitchburg WIN office provides services and training to clients from the following cities and towns:

Ashby	Harvard
Ayer	Lancaster
Berlin	Leominster
Bolton	Lunenburg
Clinton	Pepperell
Fitchburg	Shirley
Groton	Sterling
Townsend	

Table 31 shows the characteristics of registrants at the local WIN office for the same period, October 1 to March 31, for Fiscal Years 1980 and 1981. Table32 is a breakdown of services provided from October 1 to March 31, 1981.

C. Apprenticeship

Apprenticeship is a training system through which a person learns a skilled trade on the job under an experienced craft worker with related classroom instruction. The training period runs from one to six years for different skills; most require four years. Apprenticeship Information Centers provide information, guidance and counselling to applicants regarding apprenticeship opportunities with special emphasis placed on assisting minorities, youth, women and veterans.

Table 31
Selected Characteristics
WIN Registrants
Fitchburg-Leominster SMSA

Characteristics	Cumulative Total 10/1/79-3/31/80	Cumulative Total 10/1/80-3/31/81	On Hand At End of Period 10/1/79-3/31/80	On Hand At End of Period 10/1/80-3/31/81
Total	1231	1217	878	1023
Age				
Under 20	103	74	58	59
20-29	292	328	196	266
30-34	324	318	235	276
35-39	242	238	187	204
40-54	252	237	190	200
55+	18	22	12	18
Sex				
Male	310	291	176	217
Female	921	926	702	806
Education				
0-7 Years	86	83	61	68
8-11 Years	568	535	396	441
12 Years	453	474	333	401
Over 12 Years	124	125	88	113
Race				
White	1085	1033	772	874
Black	37	55	27	47
Hispanic	104	123	74	98
Other	5	6	5	4

Source: Employment Service Automated Reporting System (ESARS), Table 30.

Table 32
Training and Employment Services
Fitchburg WIN Office
October 1, 1980 to March 31, 1981

Services For Win Registrants	Cumulative (including carryovers)	Total On Hand At End Of Period
Working Registrants	477	385
Employed Part-time	164	137
Institutional Training	0	0
OJT	8	4
Work Experience	0	0
Suspense to Employment	29	23
Suspense to Training	59	49
Other Noncomponent Activity	420	251
Unassigned	226	140

Source: Employment Service Automated Reporting System (ESARS) Table 32

D. Projects With Industry (PWI)

This is a job linkage system between the Massachusetts Rehabilitation Commission and the electronics industry which was originally implemented in 1979. The program has made well over 200 job placements. The average salary of a person placed through PWI was $11,900. In addition to the placement activities, the program has allowed clients of the Massachusetts Rehabilitation Commission access to no cost training opportunities in the private industry sector.

E. Montachusett Regional Vocational School

"Monty Tech" is a regional-technical school offering students from the communities of Ashby, Barre, Fitchburg, Gardner, Hubbardston, Lunenburg, Royalston, Sterling and Winchendon, an opportunity to receive in-depth training in a number of vocational-technical areas. The towns of Orange, Petersham, and Westminister are expected to be added to the school district. Table 33 lists the courses available and the results of a follow -up study conducted with the 1980 graduates. Almost 65 percent were working in the area they specialized in, while another 28 percent were working, but outside their trades. An important part of the program offers seniors a chance to gain experience through a Cooperative Education Program. It is designed so that a student is available on an every-other-week basis. An employer can benefit by adding extra manpower while the student benefits by getting experience in his area of specialization. Also, the school has offered the following post-graduate courses in allied health careers: Dental Assistant, Dental Laboratory Technician, Medical Assistant, Medical Laboratory Technician, Practical Nurse, Rehabilitation Nursing Assistant, Nurses Aide and Geriatric Nurses Aide. However, it is most likely that these post graduate programs will be terminated to comply with budget restrictions due to the implementation of Proposition 2½.

F. Leominster Trade High School

Leominster Trade participates in a Cooperative Education Program similar to that provided by the Montachusett Regional School. The school offers the following vocational-technical courses:

Auto Body Repair	Industrial Electronics
Auto Mechanics	Graphic Communications
Carpentry	Machine & Tool Design Drafting
Computer Technician	Welding

Table 33
Survey of 1980 Graduates
Montachusett Regional Vocational Technical School
Fitchburg, Massachusetts

Program	Working In Trade	Working Not in Trade	Not Working	Total
Air Conditioning	5	0	0	5
Auto Body	3	1	0	4
Auto Mechanics	9	1	3	13
Cabinet Making	6	2	0	8
Carpentry	9	3	1	13
Commercial Art	3	6	0	9
Data Processing	4	6	2	12
Dietary Aide	2	10	1	13
Early Child Care	4	9	1	14
Electricity	11	1	1	13
Electronics	15	1	1	17
Food Trade	11	1	0	12
Graphic Arts	3	4	0	7
Health Preparation	6	4	1	11
Machine & Tool Drafting	2	0	1	3
Machine Shop	12	1	1	14
Plant Maintenance	5	1	1	7
Sheet Metal	6	2	0	8
Welding	8	1	1	10
TOTAL	124	54	15	193

Source: Office of Cooperative Education and Job Placement

G. Mount Wachusett Community College

Mount Wachusett Community College is a public two year educational institution that attempts to meet the post high-school educational needs of the local community. It offers distinctly higher education which allows many graduates to transfer to four-year colleges or universities. The school includes a Division of Continuing Education and Community Services which offers both credit and noncredit courses during evening and summer sessions. The primary goal of this division is to provide for the specific educational and training needs of the individuals who live in the area. Career Programs are offered in the following areas:

Business Technology	Human Services
Data Processing	Industrial Management
Electronic Technology	Law Enforcement
Executive Secretarial	Mechanical Engineering
Fire Science	Nursing
Public Communication	

Table 34 provides a four year overview on the status of career program graduates.

Fitchburg State College

Fitchburg State College is a public four-year educational institution offering baccalaureate degrees in several major fields of study. In addition, the school provides graduate study in many areas. Table 35 shows the results of a placement survey of the class of 1980.

Table 34

MOUNT WACHUSETT COMMUNITY COLLEGE

CAREER PROGRAM GRADUATES *

A FOUR YEAR OVERVIEW

	1977	1978	1979	1980
TOTAL CAREER PROGRAM GRADUATES	324	325	287	323
TOTAL RESPONDING TO SURVEY	299 (92%)	296 (91%)	257 (89%)	266 (82%)
STATUS UNKNOWN	25 (8%)	29 (9%)	30 (11%)	57 (18%)
CURRENT STATUS				
Employed in related field	147 (89%)	166 (86%)	207 (83%)	171 (87%)
Employed in non-related field	17 (11%)	26 (14%)	24 (17%)	22 (13%)
TOTAL EMPLOYED	164 (51%)	192 (67%)	224 (77%)	193 (72%)
TOTAL CONTINUING EDUCATION FULL-TIME	56 (49%)	62 (32%)	48 (23%)	52 (19%)
TOTAL CONTINUING EDUCATION PART-TIME	---	---	15 (3%)	20 (7%)
TOTAL UNEMPLOYED - NOT LOOKING FOR WORK	1	4	3	4 (2%)
TOTAL UNEMPLOYED - LOOKING FOR WORK	0 (0%)	6 (2%)	9 (2%)	3 (1%)

* DAY AND EVENING DIVISION COMBINED

Source: Student Personnel Services.

Table 35
Placement Survey Class of 1980
Fitchburg State College

	Graduated	Responded	Total Employed	Total Unemployed	Employed in Field	Employed in Related Field	Employed in Unrelated Field	Graduate School	Not Seeking Employment	Seeking Employment in Teaching	Seeking Non-teaching Employment	Seeking Either Teaching or Non-teaching employ.
Early Childhood	27	9 33%	9 100%	0	4 44%	3 33%	2 22%	0	6 67%	2 22%	1 11%	0
Elementary	33	21 64%	20 95%	1 5%	13 62%	7 33%	0	1 5%	11 52%	9 43%	0	0
Industrial Arts	94	40 43%	40 100%	0	33 83%	1 3%	4 10%	0	0	1 3%	0	0
Special Education	135	50 37%	49 98%	0	38 76%	11 22%	1 2%	3 6%	41 82%	6 12%	0	1 4%
Biology	29	13 45%	9 69%	1 8%	3 23%	2 15%	4 31%	3 23%	10 77%	0	1 8%	1 8%
History	14	7 50%	6 43%	1 14%	0	2 29%	2 29%	1 14%	4 57%	3 43%	0	0
English	18	9 50%	8 89%	1 11%	1 11%	2 22%	4 44%	1 11%	8 89%	0	1 11%	0
Mathematics	10	8 80%	8 100%	0	4 50%	3 38%	1 13%	1 13%	8 100%	0	0	0
Nursing	153	47 31%	46 98%	0	39 83%	6 13%	1 2%	1 2%	41 87%	0	2 4%	2 4%
Industrial Science	32	10 31%	10 100%	0	1 10%	9 90%	0	0	7 70%	0	1 10%	2 10%
Vocational Education	63	63 100%	63 100%	0	63 100%	0	0	0	63 100%	0	0	0
Medical Technology	25	15 60%	15 100%	0	14 93%	1 7%	0	0	14 93%	0	0	0
Geography	5	0										

Source: Career Planning and Placement Center

A P P E N D I X

Table 1
Job Bank Openings
by Occupational Category
March 1981

	State	Boston	Fall River	Fitchburg Leominster	Lawrence Haverhill*	Lowell	New Bedford	Pittsfield	Springfield Chicopee Holyoke	Worcester	Balance of State
TOTAL - ALL OCCUPATIONS	7,510	2,514	157	222	550	290	250	158	680	842	2,083
Professional, Technical, Managerial	992	457	8	7	43	38	32	25	150	103	146
Architect & Engineering	220	63	--	2	3	22	7	4	29	9	27
Math. & Physical Science	65	34	1	--	2	7	1	--	4	--	15
Life & Social Sciences	30	14	1	1	1	1	--	2	6	4	1
Medicine & Health	148	41	1	--	1	3	2	3	54	11	33
Education	44	18	--	1	12	--	1	--	18	2	4
Museum, Library	13	5	--	--	--	--	6	--	1	--	1
Law, Jurisprudence	4	3	--	--	--	--	--	--	--	1	--
Writing	10	3	1	--	--	--	--	--	3	--	2
Art	3	--	--	--	1	--	--	--	2	--	1
Entertainment	2	--	--	--	--	--	--	--	1	--	--
Administrative Spec.	121	63	--	--	14	4	7	3	7	18	11
Managers	266	164	4	1	11	1	5	11	18	15	45
Miscellaneous, Prof., Tech., Mgr.	62	10	--	2	4	--	2	2	7	34	5
Clerical Sales	2,131	938	34	29	123	53	35	17	81	249	629
Stenography, Typing & Related	699	417	9	8	43	27	11	4	35	39	122
Computing Acc't, Recor.	440	240	11	12	18	4	12	5	24	31	87
Prod. & Stock Clerk	129	36	--	4	35	8	2	--	2	15	48
Information Distr.	81	47	6	1	4	--	2	2	3	4	11
Misc. Clerical	49	25	--	2	2	--	--	--	3	9	6
Salespersons Services	29	3	2	2	1	--	--	2	5	4	19
Miscellaneous Sales	704	82	6	--	20	11	8	4	9	147	336

Table 1
Job Bank Openings
by Occupational Category
March 1981
(continued)

	State	Boston	Fall River	Fitchburg Leominster	Lawrence Haverhill*	Lowell	New Bedford	Pittsfield	Springfield Chicopee Holyoke	Worcester	Balance of State
Service	1,399	320	16	22	68	60	27	20	200	166	492
Domestic Service	84	57	--	--	5	8	0	13	4	7	16
Food & Beverage Preparation	273	98	2	6	21	--	6	--	18	19	99
Protective Services	442	59	9	6	8	44	9	--	51	80	133
Building & Related	129	46	1	--	14	6	10	1	11	22	21
Other Service Occupations	471	60	4	10	20	2	--	6	116	31	223
Farming, Fishing, Forestry	209	38	5	--	2	--	11	0	45	26	69
Plant Farming	104	36	5	--	2	--	11	--	22	--	29
Animal Farming	5	1	--	--	--	--	--	--	--	1	2
Forestry	100	1	--	--	--	--	--	--	23	25	38
Processing	246	33	18	47	20	1	9	4	30	17	67
Ore Refining, Foundry	22	--	3	--	1	--	--	2	2	2	11
Food, Tobacco	32	10	--	3	1	--	--	2	2	1	11
Paper	1	--	--	--	--	--	--	--	--	1	--
Chemicals, Plastics, Synthetics	141	11	14	39	7	--	3	--	24	12	27
Stone, Clay, Glass	3	--	1	--	--	--	--	--	--	--	3
Leather & Textiles	23	2	--	5	10	--	6	--	2	1	3
Processing Occupations NEC	24	10	--	--	1	1	--	--	--	--	13

Table 1

Job Bank Openings
by Occupational Category
March 1981

(continued)

	State	Boston	Fall River	Fitchburg Leominster	Lawrence Haverhill*	Lowell	New Bedford	Pittsfield	Springfield Chicopee Holyoke	Worcester	Balance of State
Machine Trades	602	138	17	34	67	24	34	31	41	69	184
Metal Machining	149	46	8	4	7	4	3	2	20	23	35
Metal Working NEC	80	19	--	--	24	3	--	--	1	11	36
Mechanics & Repair	150	43	3	6	8	14	9	4	9	18	41
Printing & Paperworking	33	4	--	--	9	--	2	7	7	3	5
Wood Machining	54	17	--	--	2	--	--	2	--	2	33
Textiles	51	3	6	7	6	--	20	1	--	9	3
Machine Trades NEC	85	6	--	17	11	3	--	15	4	3	31
Benchwork	702	158	45	27	72	47	66	36	63	60	176
Metal Products	131	64	--	4	1	--	6	--	3	7	47
Scientific & Electrical Equipment	242	45	--	1	24	33	54	25	31	6	39
Plastics, Synthetic Rubber	10	2	--	2	4	--	--	1	--	--	2
Stone & Wood Products	20	4	--	--	2	--	--	1	--	--	12
Textile, Leather	249	40	45	12	34	8	5	9	24	40	55
Benchwork Occupations	50	5	--	8	11	6	1	--	5	7	23
Structural	605	241	10	17	42	34	15	17	38	50	157
Metal Fabrication	125	77	3	5	12	13	1	2	4	2	16
Welders	69	23	--	--	9	--	--	0	10	2	29
Electrical	76	34	1	1	4	4	3	1	12	6	13

Table 1

Job Bank Openings
by Occupational Category
March 1981

(continued)

	State	Boston	Fall River	Fitchburg Leominster	Lawrence Haverhill*	Lowell	New Bedford	Pittsfield	Springfield Chicopee Holyoke	Worcester	Balance of State
Structural (continued)											
Painting	33	10	1	--	5	8	2	4	1	3	2
Excavating, Grading etc.	25	20	--	--	--	1	--	1	--	--	2
Construction NEC	243	72	4	11	9	6	5	8	8	30	84
Structural Occupations NEC	34	5	1	--	3	2	4	1	3	7	11
Miscellaneous	624	191	4	39	113	33	21	8	32	102	163
Motor Freight Occupations	76	32	--	7	13	1	1	2	--	14	13
Transportation Occupations	70	30	--	--	--	--	10	2	1	3	24
Packing, Material Handling	439	126	4	30	99	30	8	3	20	82	111
Production Distribution of Utilities	14	1	--	2	--	--	--	1	7	1	2
Graphic Art Work	20	2	--	--	1	--	1	--	4	2	11
Other	5	--	--	--	--	2	1	--	--	--	2

* Lawrence/Haverhill data for February

Source: Job Bank - March 1981

NEC: Not elsewhere classified

Table 2

Average Pay by Occupational Category
Massachusetts Job Banks
March 1981

	State	Boston	Fall River	Fitchburg Leominster	Lawrence Haverhill 1/	Lowell	New Bedford	Pittsfield	Springfield Chicopee Holyoke	Worcester	Balance of State
TOTAL - ALL OCCUPATIONS	$ 9,576	$10,413	$ 8,347	$ 8,396	$ 9,378	$10,068	$ 8,842	$ 9,520	$10,289	$ 8,826	$ 8,896
Prof., Tech., Managerial 2/	14,844	16,286	15,149	13,029	12,807	18,307	11,292	11,627	14,099	11,826	13,711
Architect & Engineering	18,729	20,294	--	16,200	13,440	18,075	13,294	19,500	18,008	17,843	15,737
Math. & Physical Science	19,112	20,256	16,000	--	17,304	23,563	10,400	--	18,269	--	16,960
Life & Social Sciences	13,078	15,057	13,165	10,600	10,500	9,000	--	9,758	12,850	9,416	14,500
Medicine & Health	12,749	12,983	10,400	--	10,000	12,827	11,660	12,480	13,171	12.209	12,086
Education	12,549	12,860	--	9,000	11,100	--	9,500	--	12,123	9,640	16,169
Museum, Library	9,752	11,494	--	--	--	--	7,800	--	10,625	--	11,878
Law Jurisprudence	15,103	15,804	--	--	--	--	--	--	--	13,000	--
Writing	14,346	18,152	7,662	--	--	--	--	--	13,000	--	14,000
Art	11,000	--	--	--	16,916	--	--	--	10,400	--	12,200
Entertainment	12,480	--	--	--	--	--	--	--	13,000	--	--
Admin. Spec.	14,087	15,398	--	--	12,980	--	10,610	11,573	13,712	12,940	14,202
Managers	14,293	15,053	18,492	11,700	13,099	--	14,140	10,831	14,271	13,266	12,451
Misc., Prof., Tech.,	9,662	12,375	--	13,750	13,966	--	10,000	8,800	11,763	7,679	13,348
Clerical Sales 2/	8,211	8,544	7,819	8,215	8,713	8,433	8,032	8,459	8,774	7,798	7,774
Steno., Typing & Related	8,634	8,721	8,138	7,852	9,082	8,975	7,940	8,751	8,378	8,109	8,742
Computing Acc't., Recor.	8,169	8,255	7,592	8,508	9,328	8,294	8,080	8,216	8,138	7,846	8,013
Prod. & Stock Clerk	8,430	9,104	--	8,320	8,109	8,832	12,640	--	7,984	8,525	7,540
Information Distr.	8,430	8,800	7,696	7,800	7,722	--	7,124	6,968	7,281	10,184	7,667
Miscellaneous Clerical	8,920	8,726	--	8,108	8,060	7,973	--	--	8,533	8,706	11,272
Salespersons Services	12,778	18,867	10,400	--	15,600	--	--	--	10,400	--	12,682
Miscellaneous Sales	7,549	8,143	7,072	8,020	8,343	7,233	7,163	8,963	11,856	7,518	7,089

Table 2

Average Pay by Occupational Category
Massachusetts Job Banks
March 1981

(continued)

	State	Boston	Fall River	Fitchburg Leominster	Lawrence Haverhill 1/	Lowell	New Bedford	Pittsfield	Springfield Chicopee Holyoke	Worcester	Balance of State
Service 3/	$ 3.94	$ 3.94	$ 3.42	$ 3.39	$ 3.87	$ 3.55	$ 4.32	$3.43	$ 4.12	$ 4.00	$3.91
Domestic	3.49	3.50	--	--	3.50	--	--	--	3.35	3.50	3.48
Food & Beverage Preparation	4.05	4.07	3.35	3.35	3.88	3.84	5.35	3.35	4.19	3.84	4.16
Protective Services	3.95	3.92	3.37	3.48	4.05	3.49	4.41	--	4.31	4.12	3.83
Building & Related Prods.	3.91	4.15	3.75	--	4.18	3.54	3.81	4.12	3.86	3.74	3.84
Other Service Occupations	3.95	4.00	3.48	3.35	3.66	3.75	3.43	3.47	4.07	4.05	3.91
Farming, Fishing, Forestry 3/	4.13	4.39	3.50	--	4.50	--	4.33	--	4.04	3.40	4.02
Plant Farming	3.92	4.37	3.50	--	4.50	--	4.33	--	3.59	--	3.54
Animal Farming	3.95	4.00	--	--	--	--	--	--	--	3.40	4.18
Forestry	4.43	5.50	--	--	--	--	--	--	4.46	--	4.37
Processing 3/	4.24	4.12	3.80	4.00	4.36	5.00	4.75	3.43	5.44	4.47	3.95
Ore Refining, Foundry	4.07	--	4.00	--	3.50	--	--	3.50	5.43	4.00	3.81
Food, Tobacco	3.96	3.91	--	4.67	4.00	5.00	--	3.35	4.18	3.75	3.88
Paper	3.50	--	--	--	--	--	--	--	--	3.50	--
Chem., Plastic, Synthetic	4.37	3.95	3.70	3.95	5.27	--	3.75	--	5.65	4.75	4.11
Stone, Clay, Glass	4.21	--	4.64	--	--	--	--	--	--	--	4.00
Leather & Textiles	4.30	4.50	--	4.00	3.87	--	5.25	--	4.20	3.75	3.55
Processing Occup. NEC	4.11	4.45	--	--	4.00	--	--	--	--	--	3.85
Machine Trades 3/	5.05	5.70	4.04	4.02	4.60	5.34	5.00	5.18	5.32	4.86	4.88
Metal Machining	5.73	6.12	4.30	5.30	6.36	5.63	6.75	5.20	5.62	5.21	5.94
Metal Working NEC	4.49	4.39	--	--	4.15	4.42	--	--	3.80	4.43	4.55
Mechanics & Repair	5.41	5.48	4.33	5.19	6.08	5.64	4.67	4.69	4.93	4.83	5.92

Table 2

Average Pay by Occupational Category
Massachusetts Job Banks
March 1981
(continued)

	State	Boston	Fall River	Fitchburg Leominster	Lawrence Haverhill 1/	Lowell	New Bedford	Pittsfield	Springfield Chicopee Holyoke	Worcester	Balance of State
Printing & Paperworking	$ 4.51	$ 5.25	$ --	$ --	$ 4.05	$ 4.35	$ 5.00	$ 4.64	$ 4.91	$ 3.86	$ 3.90
Wood Machining	5.07	7.32	--	--	3.75	--	--	4.50	--	4.25	4.00
Textiles	4.34	3.40	3.55	3.35	4.25	4.88	4.89	3.50	--	4.83	3.78
Machine Trades NEC	4.37	5.02	--	3.51	4.19	--	--	5.76	5.85	5.54	3.88
Benchwork 3/											
Scientific & Elect. Equipment	3.97	4.50	--	6.00	3.89	3.82	3.42	4.35	3.48	3.44	4.50
Stone & Wood Products	3.68	4.25	--	3.75	3.35	--	--	3.50	--	--	3.50
Textile, Leather	3.67	3.76	3.79	3.43	4.19	3.98	4.25	3.47	3.41	3.60	3.66
Metal Products	3.59	3.40	--	3.55	6.00	--	3.42	--	3.57	3.61	3.86
Other Benchwork Occupations	4.71	4.70	--	3.73	4.02	4.92	4.00	3.50	4.00	4.03	3.68
Structural 3/	5.45	5.81	4.95	4.93	6.62	5.60	4.52	5.24	6.31	4.66	5.11
Metal Fabrication	5.77	5.86	4.99	4.27	7.60	6.42	5.76	4.00	7.87	5.00	5.09
Welders	5.58	5.78	--	--	6.25	--	--	--	6.30	5.00	5.13
Electrical	5.71	6.18	5.00	3.50	6.93	4.56	6.08	8.18	5.26	5.77	5.20
Painting	5.78	7.27	7.00	--	4.35	4.88	4.00	5.00	5.00	7.00	5.00
Excavating, Grading etc.	5.00	4.50	--	--	--	6.00	--	7.00	--	--	7.00
Construction NEC	5.31	5.82	4.75	5.36	7.33	5.78	4.05	5.05	7.59	4.33	5.16
Structural Occupations NEC	4.37	4.77	3.50	--	5.00	4.50	3.90	5.50	5.46	3.96	4.28

Table 2

Average Pay by Occupational Category
Massachusetts Job Banks
March 1981

(continued)

	State	Boston	Fall River	Fitchburg Leominster	Lawrence Haverhill 1/	Lowell	New Bedford	Pittsfield	Springfield Chicopee Holyoke	Worcester	Balance of State
Miscellaneous 3/	$ 4.38	$ 4.16	$ 3.45	$ 3.96	$ 4.06	$ 4.19	$ 3.73	$ 4.38	$ 4.91	$ 4.11	$ 4.47
Motor Freight	4.78	5.06	--	3.96	4.04	5.75	3.35	3.75	--	4.57	5.48
Transportation Occup. NEC	4.41	4.21	--	--	--	--	3.73	3.35	3.50	3.65	5.18
Packaging, Materials Handling	4.00	3.87	3.45	3.68	4.07	4.15	3.71	5.08	4.16	4.01	4.16
Prod. Distrib. of Utilities	7.11	8.34	--	8.17	--	--	--	5.62	7.78	5.79	4.50
Graphic Art Work	4.27	5.06	--	--	4.00	--	4.38	--	4.01	4.68	4.14
Other	5.75	--	--	--	--	4.00	3.75	--	--	--	8.50

1/ Lawrence/Haverhill data for February

2/ Average yearly salary

3/ Average Hourly pay

Source: Job Bank - March 1981

NEC: Not elsewhere classified

Table 3 Occupations of Employed Persons, by Sex and Minority Status,
Area : FITCHBURG-LEOMINSTER
Year : 1979

Occupational Category and Group	BOTH SEXES					FEMALE				
	Total	White	Black	Other Races	Hispanic	Total	White	Black	Other Races	Hispanic
ALL OCCUPATIONS	49,122	48,454	457	211	363	20,527	20,266	159	102	91
PROFESSIONAL, TECHNICAL AND RELATED	5,792	5,772	-	20	26	2,728	2,728	-	-	10
Engineers, Technical	654	654	-	-	-	-	-	-	-	-
Physicians, Dentists and Related	248	248	-	-	8	-	-	-	-	-
Medical and Health Exc. Practs.	976	976	-	-	-	983	983	-	-	10
Teachers, Elementary and Secondary	1,693	1,693	-	-	18	1,138	1,138	-	-	-
Other Professional Workers	2,221	2,201	-	20	-	607	607	-	-	-
TECHNICIANS, EXCEPT HEALTH	733	723	-	10	36	45	45	-	-	10
MANAGERS EXCEPT FARM	4,162	4,133	16	13	12	771	771	-	-	-
SALES WORKERS	3,369	3,345	18	6	11	1,652	1,641	-	11	11
Retail Stores	1,931	1,907	18	6	-	1,325	1,325	-	-	-
Other Sales Workers	1,438	1,438	-	-	11	327	316	-	11	11
CLERICAL	8,480	8,456	24	-	12	6,296	6,296	-	-	-
Secretaries, Stenos and Typists	1,899	1,899	-	-	-	1,940	1,940	-	-	-
Other Clericals	6,581	6,557	24	-	12	4,356	4,356	-	-	-
CRAFTSMEN AND KINDRED WORKERS	7,154	7,102	52	-	45	568	560	8	-	-
Automobile and Body Repairmen	453	453	-	-	8	-	-	-	-	-
Mechanics and Repairmen Exc. Auto	975	975	-	-	-	-	-	-	-	-
Machinists	417	417	-	-	-	-	-	-	-	-
Metal Craftsmen Exc. Mach.	718	718	-	-	-	-	-	-	-	-
Carpenters	436	436	-	-	8	-	-	-	-	-
Construction Exc. Carpenters	1,032	1,017	15	-	-	-	-	-	-	-
Other Craftsmen	3,123	3,086	37	-	29	-	-	-	-	-
OPERATIVES, EXC. TRANSPORTATION	10,603	10,371	169	63	202	4,832	4,706	88	38	61
Durable Goods Manufacturing	3,841	3,799	22	20	68	1,366	1,358	8	-	28
Nondurable Goods Manufacturing	5,422	5,293	93	36	114	2,942	2,855	58	29	22
Nonmanufacturing Industries	1,340	1,279	54	7	20	524	493	22	9	11
TRANSPORT OPERATIVES	1,285	1,238	47	-	-	86	86	-	-	-
Truck Drivers	719	697	22	-	-	-	-	-	-	-
Other Transport, Operatives	566	541	25	-	-	-	-	-	-	-
LABORERS NONFARM	1,820	1,751	41	28	-	190	180	-	10	-
SERVICE WORKERS EXC. PRIV. HOUSEHOLD	5,235	5,074	90	71	19	3,067	2,961	63	43	-
Cleaning Service	1,066	1,056	-	10	-	304	304	-	-	-
Food Service	1,900	1,861	6	33	-	1,406	1,374	-	32	-
Health Service	757	698	59	-	-	738	686	52	-	-
Protective Service	643	643	-	-	-	35	35	-	-	-
Other Service Workers	869	816	25	28	19	584	562	11	11	-
PRIVATE HOUSEHOLD WORKERS	231	231	-	-	-	227	227	-	-	-
AGRICULTURAL WORKERS	258	258	-	-	-	65	65	-	-	-

Source: Summary Manpower Indicators, Lawrence-Berkeley Laboratory
The Decennial Census of Population, 1970

TABLE 4--ES JOB BANK OPENINGS IN REPORTING DISTRICTS
BY OCCUPATIONAL CATEGORY
FITCHB/LEOMIN MASSACHUSETTS
MARCH 1981

OCCUPATIONAL CATEGORY	OPENINGS AVAILABLE				OPENINGS UNFILLED AT MONTH END			
	NUMBER		AVERAGE PAY		TOTAL		UNFILLED 30 DAYS OR MORE	
	CURRENT	LAST MONTH	CURRENT	LAST MONTH	CURRENT	LAST MONTH	CURRENT	LAST MONTH
TOTAL, ALL OCCUPATIONS	222	293	$ 8,396/YR	$ 8,588/YR	121	155	56	110
PROFESSIONAL, TECHNICAL, AND MANAGERIAL	7	18	13,029/YR	11,701/YR	7	10	5	6
CLERICAL AND SALES	29	58	8,215/YR	8,342/YR	18	38	9	28
SERVICE	22	26	3.39/HR	4.01/HR	14	18	8	6
PROCESSING	47	67	4.00/HR	3.84/HR	13	33	7	29
MACHINE TRADES	34	34	4.02/HR	4.23/HR	16	20	8	12
BENCH WORK	27	23	3.65/HR	3.66/HR	17	14	9	8
STRUCTURAL WORK	17	16	4.93/HR	5.16/HR	15	11	6	10
MISCELLANEOUS	39	51	3.96/HR	3.99/HR	21	11	4	11

TABLE 5--ES JOB BANK OPENINGS IN REPORTING DISTRICTS
AND PERCENT DISTRIBUTION OF JOB BANK OPENINGS BY SELECTED INDUSTRY GROUP
FITCHB/LEOMIN MASSACHUSETTS
MARCH 1981

SELECTED INDUSTRY GROUP	OPENINGS AVAILABLE TOTAL	OPENINGS UNFILLED TOTAL	OPENINGS UNFILLED 30 DAYS OR MORE TOTAL	30 DAYS OR MORE AS A % OF TOTAL UNFILLED	PERCENT DISTRIBUTION OF OPENINGS AVAILABLE	PERCENT DISTRIBUTION OF OPENINGS UNFILLED	PERCENT DISTRIBUTION OF OPENINGS UNFILLED 30
TOTAL OPENINGS, ALL INDUSTRIES	222	121	56	46.28%	100.00%	100.00%	100.00%
TOTAL CONSTRUCTION (15-17)	11	9	3	33.33%	4.95%	7.44%	5.36%
BLDG. CONST.-GEN. CONTR. & OPER. BLDR. (15)	1	1	1	100.00%	9.09%	11.11%	33.33%
CONSTRUCTION--SPECIAL TRADE CONTRACTORS(17)	10	8	2	25.00%	90.91%	88.89%	66.67%
TOTAL MANUFACTURING (20-39)	135	62	20	32.26%	60.81%	51.24%	35.71%
DURABLE GOODS (24,25,32-39)	8	7	1	14.29%	5.93%	11.29%	5.00%
FURNITURE AND FIXTURES (25)	2	1	0	.00%	25.00%	14.29%	.00%
PRIMARY METAL INDUSTRIES (33)	3	3	1	33.33%	37.50%	42.86%	100.00%
MACHINERY, EXCEPT ELECTRICAL (35)	1	1	0	.00%	12.50%	14.29%	.00%
MISCELLANEOUS MANUFACTURING INDUSTRIES (39)	2	2	0	.00%	25.00%	28.57%	.00%
NONDURABLE GOODS (20-23,26-31)	127	55	19	34.55%	94.07%	88.71%	95.00%
FOOD AND KINDRED PRODUCTS (20)	1	1	0	.00%	.79%	1.82%	.00%
TEXTILE MILL PRODUCTS (22)	15	10	3	30.00%	11.81%	18.18%	15.79%
APPAREL AND OTHER FINISHED PROD.,FAB. (23)	6	3	0	.00%	4.72%	5.45%	.00%
PAPER AND ALLIED PRODUCTS (26)	5	5	2	40.00%	3.94%	9.09%	10.53%
PRINTING, PUBLISHING, AND ALLIED IND. (27)	2	2	0	.00%	1.57%	3.64%	.00%
CHEMICALS AND ALLIED PRODUCTS (28)	3	3	1	33.33%	2.36%	5.45%	5.26%
RUBBER AND MISC. PLASTICS PRODUCTS (30)	83	24	6	25.00%	65.35%	43.64%	31.58%
LEATHER AND LEATHER PRODUCTS (31)	12	7	7	100.00%	9.45%	12.73%	36.84%
TOTAL TRANS., COMM., ELEC., GAS, SAN. SVC (40-49)	5	2	0	.00%	2.25%	1.65%	.00%
LOCAL TRANSIT AND INTERURB. HIWWY TRANS(41)	3	0	0	.00%	60.00%	.00%	.00%
COMMUNICATION (48)	2	2	0	.00%	40.00%	100.00%	.00%
TOTAL WHOLESALE TRADE (50-51)	3	3	2	66.67%	1.35%	2.48%	3.57%
WHOLESALE TRADE--DURABLE GOODS (50)	1	1	1	100.00%	33.33%	33.33%	50.00%
WHOLESALE TRADE--NONDURABLE GOODS (51)	2	2	1	50.00%	66.67%	66.67%	50.00%
TOTAL RETAIL TRADE (52-59)	19	9	4	44.44%	8.56%	7.44%	7.14%
BLDG. MAT., HW, GAR. SUP., MOB.HM DEAL(52)	1	1	0	.00%	5.26%	11.11%	.00%
GENERAL MERCHANDISE STORES (53)	3	0	0	.00%	15.79%	.00%	.00%
FOOD STORES (54)	7	3	2	66.67%	36.84%	33.33%	50.00%
AUTOMOTIVE DEALERS AND GAS SVC. STATION(55)	3	2	1	50.00%	15.79%	22.22%	25.00%
FURNITURE, HOME FUR. & EQUIP. STORES (57)	1	0	0	.00%	5.26%	.00%	.00%
EATING AND DRINKING PLACES (58)	4	3	1	33.33%	21.05%	33.33%	25.00%

TABLE 5--ES JOB BANK OPENINGS IN REPORTING DISTRICTS
AND PERCENT DISTRIBUTION OF JOB BANK OPENINGS BY SELECTED INDUSTRY GROUP
FITCHB/LEOMIN MASSACHUSETTS
MARCH 1981

SELECTED INDUSTRY GROUP	OPENINGS AVAILABLE	OPENINGS UNFILLED			PERCENT DISTRIBUTION OF OPENINGS		
			30 DAYS OR MORE				
	TOTAL	TOTAL	TOTAL	AS A % OF TOTAL UNFILLED	AVAILABLE	UNFILLED	UNFILLED 30
TOTAL FINANCE, INSURANCE, AND REAL ESTATE (60-67)	3	1	0	.00%	1.35%	.83%	.00%
BANKING (60)	1	1	0	.00%	33.33%	100.00%	.00%
INSURANCE (63)	1	0	0	.00%	33.33%	.00%	.00%
INSURANCE AGENTS, BROKERS, AND SERVICE (64)	1	0	0	.00%	33.33%	.00%	.00%
TOTAL SERVICES (70-89)	32	22	14	63.64%	14.41%	18.18%	25.00%
PERSONAL SERVICES (72)	4	0	0	.00%	12.50%	.00%	.00%
BUSINESS SERVICES (73)	13	9	8	88.89%	40.63%	40.91%	57.14%
AUTOMOTIVE REPAIR, SERVICES, & GARAGES (75)	1	1	0	.00%	3.13%	4.55%	.00%
MISCELLANEOUS REPAIR SERVICES (76)	3	3	0	.00%	9.38%	13.64%	.00%
AMUSEMENT AND RECR. SVC. EXCEPT MOVIES (79)	1	0	0	.00%	3.13%	.00%	.00%
HEALTH SERVICES (80)	2	2	1	50.00%	6.25%	9.09%	7.14%
LEGAL SERVICES (81)	1	1	1	100.00%	3.13%	4.55%	7.14%
SOCIAL SERVICES (83)	5	5	4	80.00%	15.63%	22.73%	28.57%
MEMBERSHIP ORGANIZATIONS (86)	2	1	0	.00%	6.25%	4.55%	.00%
TOTAL PUBLIC ADMINISTRATION (91-97)	14	13	13	100.00%	6.31%	10.74%	23.21%
EXEC., LEGIS., AND GENL GOVMT, EXC FIN.(91)	1	1	1	100.00%	7.14%	7.69%	7.69%
ADMINISTRATION OF HUMAN RESOURCES PGMS.(94)	13	12	12	100.00%	92.86%	92.31%	92.31%

Table 6
Energy and Nonenergy Intensive Industries

Industry	Occupations In the Industry For Which Vocational Education/ Technical Training Is Desirable
Nonenergy Intensive Industries	
Fabricated Metal Products	Drafter, Engineering Technician, Machinist, Machine Tool Operator, Electroplater, Tool and Die Maker, Punch-Press Operator, Drill-Press Operator, Lathe Operator, Grinding Machine Operator, Sheet Metal Worker. Welder, Filer/Grinder
Nonelectrical Machinery	Drafter, Electronic Technician, Tool and Die Maker, Machine Tool Operator, Machinist, Grinding Machine Operator, Drill-Press Operator, Lathe Machine Operator, Maintenance Mechanic, Welder, Filer/Grinder/Buffer, Secretary.
Electrical and Electronic Machinery	Machine Tool Operator, Machinist, Tool and Die Maker, Electroplater, Tester, Welder, Electronic Wirer, Electronic Assembler, Secretary, Typist
Instruments	Electrical/Electronic Technicians, Machinist, Machine Tool Operator, Machine Operator, Instrument Assembler, Accounting Clerk, Secretary, Typist
Energy Intensive Industries	
Paper and Allied Products	Industrial Truck Operator, Machine Setter, Paper Machine Winder, Slitting Machine Operator, Press Operator, Secretary
Chemical and Allied Products	Science Technicians, Maintenance Mechanics, Chemical Operator, Mixer/ Blender, Grinder Operator, Accounting Clerk, Secretary, Typist
Primary Metal Industries	Machine Tool Operator, Machinist, Filer/Grinder/Buffer, Molder, Inspector

TABLE 7 03/31/81 MASSACHUSETTS SMSA 2600 TABLE B07

JOB OPENINGS RECEIVED AND FILLED BY OCCUPATIONAL CATEGORY AND HOURLY WAGE RATE

ITEM NO	ITEM		TOTAL NONAG AND AG.	UNDER $3.10	$3.10- $3.34	$3.35- $3.49	$3.50- $3.99	$4.00- $4.49	$4.50- $4.99	$5.00- $5.49	$5.50- $5.99	$6.00 & OVER	AVERAGE	OTHER*
A	B		C	D	E	F	G	H	I	J	K	L	M	N
	OPENINGS RECEIVED													
B07010	TOTAL		1090	6	71	229	207	245	64	42	30	83	4.12	113
B07015	0-1	PROF TECH MGR	55	0	0	1	4	20	8	5	5	12	5.02	0
B07020	20-24	CLERICAL	269	0	24	12	32	61	20	4	6	0	3.95	110
B07025	25-29	SALES	49	0	23	7	12	4	2	0	0	1	3.51	0
B07030	30	DOMESTIC	4	1	1	2	0	0	0	0	0	0	3.08	0
B07035	31-39	OTHER SERV	102	5	10	31	34	6	7	1	2	5	3.72	1
B07040	4	FARM F & F	59	0	1	58	0	0	0	0	0	0	3.35	0
B07045	5	PROCESSING	131	0	1	34	40	43	5	5	1	2	3.86	0
B07050	6	MACHINE TRADES	89	0	2	22	15	17	3	8	4	18	4.99	0
B07055	7	BENCH WORK	74	0	1	28	23	13	4	0	0	5	3.83	0
B07060	8	STRUCTURAL	71	0	2	1	1	9	3	15	5	35	5.53	0
B07065	90-91	MOTOR FRGT, TRANSP	43	0	1	0	6	29	2	0	1	2	4.16	2
B07070	92	PKG MTRL HNDL	134	0	5	33	40	41	6	4	5	0	3.85	0
B07075	93-97	OTHER	10	0	0	0	0	2	4	0	1	3	5.41	0
	OPENINGS FILLED													
B07085	TOTAL		645	2	35	105	147	146	33	27	10	41	4.11	99
B07090	0-1	PROF TECH MGR	13	0	0	1	3	0	2	2	2	3	5.03	0
B07095	20-24	CLERICAL	170	0	8	5	20	34	5	2	1	0	3.88	95
B07100	25-29	SALES	19	0	7	3	3	3	3	0	0	0	3.65	0
B07105	30	DOMESTIC	2	0	0	1	1	0	0	0	0	0	3.43	0
B07110	31-39	OTHER SERV	72	2	9	15	30	7	6	1	0	2	3.69	0
B07115	4	FARM F & F	1	0	1	0	0	0	0	0	0	0	3.30	0
B07120	5	PROCESSING	101	0	1	29	32	29	5	2	1	2	3.85	0
B07125	6	MACHINE TRADES	56	0	3	18	10	9	1	7	1	7	4.68	0
B07130	7	BENCH WORK	44	0	3	14	15	10	0	1	0	1	3.74	0
B07135	8	STRUCTURAL	40	0	1	0	0	6	2	7	3	21	5.56	0
B07140	90-91	MOTOR FRGT, TRANSP	32	0	0	0	4	17	2	0	1	4	4.68	4
B07145	92	PKG MTRL HNDL	92	0	2	19	29	31	5	5	1	0	3.88	0
B07150	93-97	OTHER	3	0	0	0	0	0	2	0	0	1	5.00	0

*1 OTHER INCLUDES WAGES NOT PAID ON A TIME BASIS.

SMSA 2600

MONTHLY YEAR TO DATE

FOR PERIOD ENDING 03/31/81

Table 8
Rank Order Of Vocational Occupations
By
Total Demand, 1974-1985
Fitchburg-Leominster SMSA

Occupation	Rank	1974-1985 Total Demand	Due To Growth	Due To Separations
Secretaries other than legal, medical	1	1,306	294	1,012
Bookkeepers	2	509	14	495
Typists	3	353	45	308
Practical Nurses	3	353	122	231
Nursing Aides & Attendants	5	345	103	242
Cooks, except private	6	316	85	231
Shipping & Receiving Clerks	7	224	70	154
Sewers & Stitchers	8	196	-101	297
Bank Tellers	9	192	5	187
Electrical and Electronics Tech's	10	160	116	44
Carpenters & Apprentices	11	158	48	110
Semiskilled metal working	12	156	- 53	209
Receptionist	13	150	18	132
Hairdresser, Cosmetologist	14	145	13	132
Health Aides, except Nursing	15	130	31	99
Heavy Equipment Mechanics	16	120	21	99
Electricians & Apprentices	17	100	34	66
Computer Programmers	18	94	39	55
Machinists & Apprentices	19	85	19	66
Dental Assistants	19	85	19	66
Photographic Process Workers	21	84	29	55
Auto Mechanics & Apprentices	22	81	26	55
Clinical Lab Technologists & Technicians	23	78	12	66
Statistical Clerks	24	74	8	66
Welders and Flamecutters	25	70	26	44

Prepared by Occupation/Industry Research Department, DES, 1978

Source: Employment Requirements for the Fitchburg-Leominster Labor Market Area, By Occupation, By Industry, 1974-1985.

Table 9

INDEX OF HIGH DEMAND OCCUPATIONS BY MAJOR OCCUPATIONAL CLUSTERS IN MASSACHUSETTS

I. Professional and Technical

A. Engineers

1. Electrical Engineers
2. Industrial Engineers
3. Mechanical Engineers
4. Drafters

B. Health

5. Registered Nurses
6. Clinical Lab Technicians
7. Dental Hygienists
8. Radiological Technologists
9. Therapists

C. Other Technical

10. Electronic Technicians
11. Computer Programmers
12. Computer Systems Analysts
13. Computer Service Technologists

D. Other Professionals, Managers and Proprietors

14. Personnel and Labor Relations
15. Bank, Financial Managers
16. Buyers, Wholesale and Retail
17. Purchasing Agents
18. Health Administrators
19. Managers, Superintendents of Buildings
20. Real Estate Agents, Brokers

II. Clerical Occupations

21. Legal Secretaries
22. Medical Secretaries
23. Other Secretaries
24. Bookkeepers
25. Expeditors, Production Controllers
26. Insurance Adjusters, Examiners
27. Receptionists
28. Shipping and Receiving Clerks

III. Craft Workers

29. Carpenters and Apprentices
30. Electricians and Apprentices
31. Painters and Apprentices
32. Plumbers and Pipefitters
33. Excavating and Grading Machine Operators
34. Heavy Equipment Mechanics
35. Air Conditioning, Heating and Refrigeration Mechanics
36. Machinists
37. Tool and Die Makers
38. Radio and Television Repairers
39. Opticians and Lens Grinders

IV. Operatives

40. Assemblers
41. Photographic Process Repairers
42. Fork Lift Operatives
43. Truck Drivers
44. Lathe Machine Operatives

V. Service Workers

45. Cooks
46. Waitresses and Waiters
47. Dental Assistants
48. Health Aides
49. Practical Nurses
50. Child Care Workers

OPENINGS RECEIVED AND FILLED BY INDUSTRIAL DIVISION AND OCCUPATIONAL CATEGORY

ITEM NO	OCCUPATIONAL CATEGORIES AND DIVISIONS		OPENINGS BY INDUSTRIAL DIVISION: TOTAL	AGR FOR & FISH	MINING	CONSTR	MFG	TRANSP & UTIL	WHS & RETAIL TRADE	FINANCE INS & REAL ESTATE	SERVICES	PUBLIC ADMINISTRATION	GOVT
A	B		C	D	E	F	G	H	I	J	K	L	M
	OPENINGS RECEIVED												
10010	TOTAL		1090	1	0	50	440	31	148	17	263	140	147
10015	0-1	PROF TECH MGR	55	0	0	0	10	0	2	2	16	25	28
10020	20-24	CLERICAL	269	0	0	4	48	2	42	10	129	34	42
10025	25-29	SALES	49	0	0	0	11	0	32	1	2	3	3
10030	30	DOMESTIC	4	0	0	0	0	0	0	0	4	0	0
10035	31-39	OTHER SERVICES	102	0	0	0	11	4	22	2	59	4	9
10040	4	FARM F & F	59	0	0	0	0	0	0	1	28	30	30
10045	5	PROCESSING	131	0	0	1	119	0	8	0	1	2	2
10050	6	MACHINE TRADES	89	0	0	1	70	0	7	0	2	9	10
10055	7	BENCH WORK	74	0	0	0	60	0	0	0	7	7	7
10060	8	STRUCTURAL	71	1	0	43	10	0	3	1	6	7	8
10065	90-91	MOTOR FRGT, TRANSP	43	0	0	0	6	25	8	0	3	1	4
10070	92	PKG MTRL HNDL	134	0	0	1	86	0	24	0	6	17	3
10075	93-97	OTHER	10	0	0	0	9	0	0	0	0	1	1
	OPENINGS FILLED												
10085	TOTAL		645	2	0	31	299	24	82	12	160	35	30
10090	0-1	PROF TECH MGR	13	0	0	0	1	0	1	0	7	4	5
10095	20-24	CLERICAL	170	0	0	1	28	1	16	9	103	12	11
10100	25-29	SALES	19	0	0	0	7	0	11	1	0	0	0
10105	30	DOMESTIC	2	0	0	0	0	0	0	0	2	0	0
10110	31-39	OTHER SERVICES	72	0	0	0	7	2	18	2	37	6	6
10115	4	FARM F & F	1	1	0	0	0	0	0	0	0	0	0
10120	5	PROCESSING	101	0	0	0	95	0	5	0	0	1	1
10125	6	MACHINE TRADES	56	0	0	1	47	0	7	0	1	0	1
10130	7	BENCH WORK	44	0	0	0	41	0	1	0	1	1	1
10135	8	STRUCTURAL	40	1	0	28	5	0	2	0	3	1	2
10140	90-91	MOTOR FRGT, TRANSP	32	0	0	0	4	21	5	0	2	0	2
10145	92	PKG MTRL HNDL	92	0	0	1	61	0	16	0	4	10	1
10150	93-97	OTHER	3	0	0	0	3	0	0	0	0	0	0
	FILL RATE												
10160	TOTAL		59.2	200.0	0.0	62.0	68.0	77.4	55.4	70.6	60.8	25.0	20.4
10165	0-1	PROF TECH MGR	23.6	0.0	0.0	0.0	10.0	0.0	50.0	0.0	43.8	16.0	17.9
10170	20-24	CLERICAL	63.2	0.0	0.0	25.0	58.3	50.0	38.1	90.0	79.8	35.3	26.2
10175	25-29	SALES	38.8	0.0	0.0	0.0	63.6	0.0	34.4	100.0	0.0	0.0	0.0
10180	30	DOMESTIC	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50.0	0.0	0.0
10185	31-39	OTHER SERVICES	70.6	0.0	0.0	0.0	63.6	50.0	81.8	100.0	62.7	150.0	66.7

OPENINGS RECEIVED AND FILLED BY INDUSTRIAL DIVISION AND OCCUPATIONAL CATEGORY

ITEM NO	OCCUPATIONAL CATEGORIES AND DIVISIONS	OPENINGS BY INDUSTRIAL DIVISION										
		TOTAL	AGR FOR & FISH	MINING	CONSTR	MFG	TRANSP & UTIL	WHS & RETAIL TRADE	FINANCE INS & REAL ESTATE	SER-VICES	PUBLIC ADMIN-ISTRA-TION	GOVT
A	B	C	D	E	F	G	H	I	J	K	L	M
10190 4	FARM F & F	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10195 5	PROCESSING	77.1	0.0	0.0	0.0	79.8	0.0	62.5	0.0	0.0	50.0	50.0
10200 6	MACHINE TRADES	62.9	0.0	0.0	100.0	67.1	0.0	100.0	0.0	50.0	0.0	10.0
10205 7	BENCH WORK	59.5	0.0	0.0	0.0	68.3	0.0	0.0	0.0	14.3	14.3	14.3
10210 8	STRUCTURAL	56.3	100.0	0.0	65.1	50.0	0.0	66.7	0.0	50.0	14.3	25.0
10215 90-91	MOTOR FRGT, TRANSP	74.4	0.0	0.0	0.0	66.7	84.0	62.5	0.0	66.7	0.0	50.0
10220 92	PKG MTRL HNDL	68.7	0.0	0.0	100.0	70.9	0.0	66.7	0.0	66.7	58.8	33.3
10225 93-97	OTHER	30.0	0.0	0.0	0.0	33.3	0.0	0.0	0.0	0.0	0.0	0.0

Table 11

APPLICANTS AND NONAGRICULTURAL JOB OPENINGS BY OCCUPATION

ITEM NO	OCCUPATIONAL CODE	TOTAL REGISTERED APPS ACTIVE ANYTIME THIS FY	ACTIVE FILE							NONAGRICULTURAL OPENINGS				
			TOTAL	FEMALE	VETERAN	AGE GROUPS: UNDER 22	AGE GROUPS: 45 AND OLDER	MINORITY	ECONOMICALLY DISADVANTAGED	TOTAL RECEIVED	OPENING REC'D FEDERAL CONTRACTOR JOB LISTING	OPENING FILLED	UNFILLED OPEN: TOTAL	UNFILLED OPEN: 30 DAYS OR MORE
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
96	TOTAL	6230	2577	1338	489	391	398	235	1087	1089	352	643	350	251
96	0-1	767	295	131	100	12	55	13	65	55	10	13	33	31
96	000-169	494	188	96	55	6	27	7	49	28	4	11	12	11
96	180-199	273	107	35	45	6	28	6	16	27	6	2	21	20
96	2	1269	512	387	55	71	73	36	247	318	157	189	77	63
96	200-249	1027	425	348	37	62	53	35	213	269	150	170	49	38
96	250-299	242	87	39	18	9	20	1	34	49	7	19	28	25
96	3	783	376	273	36	59	60	39	256	106	19	74	40	32
96	300-309	35	21	21	0	6	6	6	19	4	0	2	2	1
96	310-319	326	144	105	10	26	19	6	90	36	5	29	15	11
96	320-389	422	211	147	26	27	35	27	147	66	14	43	23	20
96	4	85	36	3	9	17	8	5	13	59	28	0	58	28
96	400-429	78	33	3	8	15	8	5	12	59	28	0	58	28
96	450-461	7	3	0	1	2	0	0	1	0	0	0	0	0
96	5	513	199	102	27	16	38	34	87	131	31	101	22	16
96	6	445	162	48	42	27	27	14	54	89	21	56	30	21
96	7	525	208	157	18	24	39	31	119	74	9	44	41	32
96	8	612	214	9	99	31	21	7	37	70	18	39	23	18
96	800-859	196	67	5	34	11	6	2	13	23	5	11	11	9
96	860-899	416	147	4	65	20	15	5	24	47	13	28	12	7
96	9	1205	557	220	98	128	76	54	202	187	59	127	26	12
96	900-919	276	133	16	58	14	17	1	36	43	1	32	4	2
96	920-929	881	402	199	37	108	57	48	159	134	55	92	19	8
96	930-979	48	22	5	3	6	2	5	7	10	3	3	3	2

Table 11

TABLE 96 03/31/81 MASSACHUSETTS SMSA 2600 TABLE 96

APPLICANTS AND NONAGRICULTURAL JOB OPENINGS BY OCCUPATION

ITEM NO	OCCUPATIONAL CODE	TOTAL REGISTERED APPS ACTIVE ANYTIME THIS FY	ACTIVE FILE							NONAGRICULTURAL OPENINGS				
			TOTAL	FEMALE	VETERAN	AGE GROUPS		MINORITY	ECONOMICALLY DISADVANTAGED	TOTAL RECEIVED	OPENING REC'D FEDERAL CONTRACTOR JOB LISTING	OPENING FILLED	UNFILLED OPEN	
						UNDER 22	45 AND OLDER						TOTAL	30 DAYS OR MORE
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
96	001261-010	2	1	0	1	0	0	0	1	0	0	0	0	0
96	003161-014	2	0	0	0	0	0	0	0	0	0	0	0	0
96	003281-010	2	0	0	0	0	0	0	0	0	0	0	0	0
96	003281-014	1	1	0	0	1	0	0	0	0	0	0	0	0
96	005061-014	2	0	0	0	0	0	0	0	0	0	0	0	0
96	005281-010	2	0	0	0	0	0	0	0	0	0	0	0	0
96	007061-014	2	1	0	1	0	1	0	0	0	0	0	0	0
96	007161-026	1	0	0	0	0	0	0	0	0	0	0	0	0
96	008061-018	1	0	0	0	0	0	0	0	0	0	0	0	0
96	008261-010	0	0	0	0	0	0	0	0	1	1	0	1	0
96	012167-066	1	0	0	0	0	0	0	0	0	0	0	0	0
96	020162-014	5	2	2	0	1	0	0	0	0	0	0	0	0
96	022061-010	4	1	0	0	0	1	0	1	0	0	0	0	0
96	029261-010	1	0	0	0	0	0	0	0	2	1	0	1	1
96	041061-030	4	2	2	0	0	0	0	0	0	0	0	0	0
96	045107-010	7	4	2	1	0	1	0	3	0	0	0	0	0
96	054067-014	3	0	0	0	0	0	0	0	0	0	0	0	0
96	070101-022	1	0	0	0	0	0	0	0	0	0	0	0	0
96	074161-010	1	1	0	0	0	0	0	0	0	0	0	0	0
96	075374-010	7	3	3	0	0	0	0	2	0	0	0	3	3
96	076364-010	2	0	0	0	0	0	0	0	0	0	0	0	0
96	078361-010	2	2	2	0	0	0	0	1	0	0	0	0	0
96	078361-014	3	1	1	0	0	0	0	1	1	0	1	0	0
96	078381-014	3	1	1	1	0	0	0	0	0	0	0	0	0
96	079367-010	4	2	1	1	0	0	0	1	0	0	0	0	0
96	079371-010	12	4	4	0	0	0	0	3	1	0	1	0	0
96	079374-014	14	10	10	0	0	0	1	9	0	0	0	0	0
96	079374-022	2	0	0	0	0	0	0	0	1	0	0	0	0
96	090227-010	5	1	1	0	0	0	0	0	0	0	0	0	0
96	091227-010	19	5	5	0	0	2	0	1	0	0	0	0	0
96	092227-010	27	6	5	1	0	0	1	2	0	0	0	0	0
96	110107-010	2	1	0	0	0	1	0	0	0	0	0	0	0
96	131267-026	13	6	1	3	0	0	0	1	1	0	1	0	0
96	142061-018	1	0	0	0	0	0	0	0	0	0	0	0	0
96	159124-010	1	0	0	0	0	0	0	0	0	0	0	0	0
96	160167-010	19	5	1	2	0	0	0	1	0	0	0	0	0
96	160267-018	1	0	0	0	0	0	0	0	0	0	0	0	0
96	162157-038	8	4	2	2	0	1	0	1	1	1	0	0	0
96	163167-018	14	6	0	2	0	2	0	0	0	0	0	0	0
96	165067-010	6	0	0	0	0	0	0	0	0	0	0	0	0
96	169167-010	20	10	7	3	0	1	0	3	1	0	1	0	0
96	169167-034	12	5	4	1	0	1	0	2	0	0	0	0	0

Table 11

TABLE 96 03/31/81 MASSACHUSETTS SMSA 2600 TABLE 96
APPLICANTS AND NONAGRICULTURAL JOB OPENINGS BY OCCUPATION

ITEM NO	OCCUPATIONAL CODE	TOTAL REGISTERED APPS ACTIVE ANYTIME THIS FY	ACTIVE FILE							NONAGRICULTURAL OPENINGS				
			TOTAL	FEMALE	VETERAN	AGE GROUPS		MINORITY	ECONOMICALLY DISADVANTAGED	TOTAL RECEIVED	OPENING REC'D FEDERAL CONTRACTOR JOB LISTING	OPENING FILLED	UNFILLED OPEN	
						UNDER 22	45 AND OLDER						TOTAL	30 DAYS OR MORE
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
96	185167-014	1	1	0	0	0	0	0	1	1	0	0	0	0
96	185167-046	35	13	7	1	3	2	0	2	0	0	0	0	0
96	187167-106	19	10	4	4	1	3	1	1	0	0	0	0	0
96	187167-186	2	0	0	0	0	0	0	0	0	0	0	0	0
96	189117-022	1	1	0	1	0	1	0	0	0	0	0	0	0
96	189167-034	1	1	0	0	0	0	1	1	0	0	0	0	0
96	195107-010	7	3	1	2	0	1	1	0	0	0	0	0	0
96	195107-022	3	1	0	1	0	0	0	0	0	0	0	0	0
96	199361-010	1	1	1	0	0	1	0	0	0	0	0	0	0
96	201362-010	30	10	8	0	1	1	0	1	2	0	1	1	1
96	201362-014	6	3	3	0	1	1	0	0	1	0	0	1	1
96	201362-030	36	21	21	0	0	2	3	15	6	3	1	2	2
96	202362-014	2	1	1	0	1	0	0	1	1	1	0	0	0
96	203362-010	41	18	16	3	2	3	0	12	15	5	11	4	4
96	203582-030	16	8	7	2	1	0	2	3	2	1	2	0	0
96	203582-062	1	0	0	0	0	0	0	0	0	0	0	0	0
96	203582-066	1	0	0	0	0	0	0	0	0	0	0	0	0
96	205362-014	4	3	3	0	0	1	0	3	5	5	0	5	[illegible]
96	205362-018	1	1	1	0	0	1	0	1	0	0	0	0	0
96	205367-054	1	1	1	0	0	0	0	1	2	0	3	2	2
96	206362-010	15	6	5	0	3	0	1	1	6	0	2	4	4
96	209562-010	140	59	55	0	14	4	4	32	14	4	10	1	1
96	209587-026	0	0	0	0	0	0	0	0	1	1	0	0	0
96	209687-010	4	1	1	0	1	0	1	1	0	0	0	0	0
96	210382-010	0	0	0	0	0	0	0	0	1	0	1	0	0
96	210382-014	35	14	11	2	0	4	1	9	4	0	3	1	1
96	210382-018	11	4	3	1	0	1	0	1	1	0	0	0	[illegible]
96	210382-022	2	1	1	0	0	1	0	0	0	0	0	0	[illegible]
96	211362-010	20	11	11	0	2	3	2	10	4	0	0	0	[illegible]
96	211362-018	19	13	13	1	4	0	4	5	1	0	1	0	[illegible]
96	211462-010	39	13	13	0	4	1	0	7	0	0	0	0	[illegible]
96	213362-010	19	10	5	3	3	0	0	2	3	0	1	1	[illegible]
96	214382-014	3	1	1	0	0	1	0	1	6	0	0	6	[illegible]
96	215482-010	5	3	3	1	0	0	0	0	2	2	0	1	[illegible]
96	216382-034	1	1	1	0	0	0	0	0	1	0	0	1	[illegible]
96	216482-010	26	8	8	0	0	0	2	5	4	2	2	2	[illegible]
96	219362-010	174	66	66	1	8	5	4	34	20	6	10	6	[illegible]
96	219367-026	6	2	2	0	0	0	0	0	0	0	0	0	[illegible]
96	222387-058	19	7	1	3	2	0	0	3	4	0	2	0	[illegible]
96	235462-010	2	1	1	1	0	0	0	0	0	0	0	0	[illegible]
96	235662-022	9	3	1	1	0	0	0	1	2	1	1	0	[illegible]
96	235662-026	0	0	0	0	0	0	0	0	0	0	0	1	[illegible]

Table 11

TABLE 96 03/31/81 MASSACHUSETTS SMSA 2600 TABLE 96

APPLICANTS AND NONAGRICULTURAL JOB OPENINGS BY OCCUPATION

ITEM NO	OCCUPATIONAL CODE	TOTAL REGISTERED APPS ACTIVE ANYTIME THIS FY	ACTIVE FILE							NONAGRICULTURAL OPENINGS				
			TOTAL	FEMALE	VETERAN	AGE GROUPS		MINORITY	ECONOMICALLY DISADVANTAGED	TOTAL RECEIVED	OPENING REC'D FEDERAL CONTRACTOR JOB LISTING	OPENING FILLED	UNFILLED OPEN	
						UNDER 22	45 AND OLDER						TOTAL	30 DAYS OR MORE
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
96	237367-010	1	1	1	0	1	0	0	0	0	0	0	0	[illegible]
96	237367-022	1	1	1	0	0	1	0	1	0	0	0	0	[illegible]
96	237367-038	25	7	7	0	1	2	0	1	4	0	2	2	[illegible]
96	238362-010	3	0	0	0	0	0	0	0	0	0	0	0	[illegible]
96	241217-010	1	1	0	1	0	1	0	0	0	0	0	0	[illegible]
96	245362-014	2	1	1	0	0	0	0	1	0	0	0	0	[illegible]
96	249167-014	1	0	0	0	0	0	0	0	0	0	0	0	[illegible]
96	249367-074	12	9	9	0	0	2	2	9	4	0	3	4	[illegible]
96	250257-010	1	0	0	0	0	0	0	0	0	0	0	6	[illegible]
96	250357-018	1	1	0	0	0	0	0	1	0	0	0	0	[illegible]
96	254357-014	1	0	0	0	0	0	0	0	0	0	0	0	[illegible]
96	261357-050	4	1	1	0	0	0	0	0	0	0	0	0	[illegible]
96	261357-054	2	1	1	0	1	0	0	0	0	0	0	0	[illegible]
96	261357-062	8	1	0	0	1	0	0	0	2	0	2	0	[illegible]
96	261357-066	13	2	2	0	0	1	0	0	0	0	0	0	[illegible]
96	273353-010	8	3	0	1	0	1	0	0	1	0	0	1	[illegible]
96	273357-022	2	2	0	2	0	1	0	0	0	0	0	0	[illegible]
96	275357-034	1	1	0	0	0	0	0	0	0	0	0	0	[illegible]
96	277357-034	2	1	0	0	0	0	0	0	0	0	0	0	[illegible]
96	279357-050	6	2	0	0	1	0	0	0	3	0	1	1	[illegible]
96	279357-054	31	10	10	0	0	1	0	10	3	0	3	0	[illegible]
96	279357-062	3	1	0	0	0	0	1	1	1	0	1	0	[illegible]
96	290477-014	22	6	6	0	0	2	0	5	7	1	2	4	[illegible]
96	290477-018	10	4	1	2	0	2	0	2	4	0	3	2	[illegible]
96	292353-010	11	5	0	1	0	1	0	1	2	0	0	1	[illegible]
96	299137-010	19	5	0	1	0	1	0	0	0	0	0	0	[illegible]
96	299357-014	2	0	0	0	0	0	0	0	4	4	4	0	[illegible]
96	301474-010	9	3	3	0	0	1	0	2	0	0	1	0	[illegible]
96	309677-010	2	1	1	0	0	1	0	0	1	0	0	0	[illegible]
96	311477-014	24	8	8	0	2	2	0	7	2	0	0	0	[illegible]
96	311677-010	12	8	8	0	3	0	0	4	0	0	0	0	[illegible]
96	312474-010	20	9	7	1	0	1	0	4	0	0	0	2	[illegible]
96	313131-014	7	4	0	.2	0	1	1	0	0	0	0	0	[illegible]
96	313361-014	13	6	3	1	0	1	1	3	5	4	2	3	[illegible]
96	313361-022	25	6	2	0	4	0	0	2	2	0	1	1	[illegible]
96	313361-030	1	0	0	0	0	0	0	0	0	0	0	0	[illegible]
96	313381-010	2	0	0	0	0	0	0	0	1	0	1	0	[illegible]
96	313684-010	1	0	0	0	0	0	0	0	0	0	0	0	[illegible]
96	315361-010	14	5	2	2	0	1	1	1	0	0	0	0	[illegible]
96	316684-018	7	2	1	1	0	1	0	1	1	0	1	0	[illegible]
96	317687-010	4	0	0	0	0	0	0	0	0	0	0	0	[illegible]
96	318687-010	49	18	9	1	9	4	2	9	18	1	17	1	[illegible]

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Table 11

TABLE 96 03/31/81 MASSACHUSETTS SMSA 2600 TABLE 96

APPLICANTS AND NONAGRICULTURAL JOB OPENINGS BY OCCUPATION

ITEM NO	OCCUPATIONAL CODE	TOTAL REGISTERED APPS ACTIVE ANYTIME THIS FY	ACTIVE FILE							NONAGRICULTURAL OPENINGS				
			TOTAL	FEMALE	VETERAN	AGE GROUPS		MINORITY	ECONOMICALLY DISADVANTAGED	TOTAL RECEIVED	OPENING REC'D FEDERAL CONTRACTOR JOB LISTING	OPENING FILLED	UNFILLED OPEN	
						UNDER 22	45 AND OLDER						TOTAL	30 DAYS OR MORE
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
96	323687-010	2	1	1	0	0	0	0	1	1	0	0	1	0
96	323687-014	7	2	2	0	1	1	0	2	1	0	1	0	0
96	330371-010	2	1	0	1	0	0	0	1	1	0	0	1	1
96	332271-010	15	11	11	0	0	2	0	11	0	0	0	0	0
96	352367-010	1	1	0	1	0	0	0	0	0	0	0	0	0
96	354374-010	1	1	1	0	0	0	0	1	0	0	0	0	0
96	355377-014	1	1	0	0	0	0	0	0	0	0	0	0	0
96	355674-014	81	54	53	2	3	9	9	45	15	0	8	5	5
96	355674-018	6	3	0	2	0	0	1	0	0	0	0	0	0
96	355677-010	10	2	2	0	1	0	0	1	2	2	0	0	0
96	359677-010	11	4	4	0	0	1	1	4	0	0	0	0	0
96	359677-018	11	4	4	0	0	0	0	4	0	0	0	0	0
96	359677-026	1	0	0	0	0	0	0	0	0	0	0	0	0
96	363684-018	1	1	1	0	0	1	0	1	0	0	0	0	0
96	372667-018	1	0	0	0	0	0	0	0	0	0	0	0	0
96	372667-034	34	13	0	6	6	4	0	1	15	6	9	7	6
96	372667-038	6	1	0	0	0	0	0	0	1	0	3	0	0
96	373364-010	2	2	0	2	0	2	0	0	0	0	0	0	0
96	375263-014	9	3	1	2	0	0	0	3	0	0	0	0	0
96	382664-010	34	13	2	3	2	5	1	4	9	3	8	2	2
96	403687-018	2	0	0	0	0	0	0	0	0	0	0	0	0
96	452364-010	2	0	0	0	0	0	0	0	0	0	0	0	0
96	504382-014	2	0	0	0	0	0	0	0	0	0	0	0	0
96	509686-010	1	0	0	0	0	0	0	0	0	0	0	0	0
96	526381-010	5	1	1	0	0	0	0	1	0	0	0	0	0
96	526684-010	3	2	0	1	0	1	0	0	0	0	0	0	0
96	526686-010	1	1	1	0	0	0	0	1	0	0	0	0	0
96	529686-014	1	0	0	0	0	0	0	0	0	0	0	0	0
96	529687-074	1	1	1	0	0	0	1	1	4	0	4	0	0
96	534662-010	17	2	0	1	0	0	0	0	0	0	0	0	0
96	556682-010	3	1	0	0	0	0	1	0	0	0	0	0	0
96	556685-022	23	13	12	0	1	2	4	13	1	0	1	0	0
96	556685-038	149	58	41	5	3	9	11	28	68	3	69	11	11
96	556685-066	1	1	1	0	0	0	0	1	0	0	0	0	0
96	557382-010	12	4	0	0	1	0	2	3	1	0	0	0	0
96	558585-014	3	0	0	0	0	0	0	0	1	1	1	0	0
96	559567-010	3	0	0	0	0	0	0	0	0	0	0	0	0
96	589686-026	1	0	0	0	0	0	0	0	0	0	0	0	0
96	600280-022	20	10	0	3	1	2	0	0	8	3	4	4	4
96	600380-018	4	2	1	0	0	0	0	1	0	0	0	0	0
96	601280-046	2	2	1	2	0	2	0	0	0	0	0	0	0
96	604685-026	3	1	0	0	0	0	0	0	0	0	0	0	0

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Table 11

TABLE 96	03/31/81	MASSACHUSETTS	SMSA 2600	TABLE 96

APPLICANTS AND NONAGRICULTURAL JOB OPENINGS BY OCCUPATION

ITEM NO	OCCUPATIONAL CODE	TOTAL REGISTERED APPS ACTIVE ANYTIME THIS FY	ACTIVE FILE: TOTAL	ACTIVE FILE: FEMALE	ACTIVE FILE: VETERAN	ACTIVE FILE: AGE GROUPS: UNDER 22	ACTIVE FILE: AGE GROUPS: 45 AND OLDER	ACTIVE FILE: MINORITY	ACTIVE FILE: ECONOMICALLY DISADVANTAGED	NONAGRICULTURAL OPENINGS: TOTAL RECEIVED	NONAGRICULTURAL OPENINGS: OPENING REC'D FEDERAL CONTRACTOR JOB LISTING	NONAGRICULTURAL OPENINGS: OPENING FILLED	NONAGRICULTURAL OPENINGS: UNFILLED OPEN: TOTAL	NONAGRICULTURAL OPENINGS: UNFILLED OPEN: 30 DAYS OR MORE
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
96	605280-010	2	0	0	0	0	0	0	0	0	0	0	0	0
96	609684-014	1	1	0	0	0	0	0	1	2	0	1	1	1
96	609685-018	2	0	0	0	0	0	0	0	0	0	0	0	0
96	615482-022	2	0	0	0	0	0	0	0	0	0	0	0	0
96	617685-026	2	1	1	0	0	0	0	0	1	1	1	0	0
96	620261-010	39	9	0	4	3	1	0	0	8	1	4	3	3
96	620261-022	1	0	0	0	0	0	0	0	0	0	0	0	0
96	621281-014	3	1	0	0	0	0	0	0	0	0	0	0	0
96	625281-010	11	6	0	1	1	1	0	2	1	1	1	0	0
96	625281-034	3	0	0	0	0	0	0	0	0	0	0	0	0
96	637261-014	1	0	0	0	0	0	0	0	0	0	0	0	0
96	637261-018	1	1	1	0	0	0	0	1	0	0	0	0	0
96	637261-026	1	1	0	0	0	0	0	0	0	0	0	0	0
96	637664-010	1	0	0	0	0	0	0	0	0	0	0	0	0
96	638261-014	1	1	0	1	0	0	0	1	0	0	0	0	0
96	638281-014	16	8	0	5	0	1	0	2	5	2	3	4	2
96	638281-018	2	1	0	0	1	0	0	0	0	0	0	0	0
96	638684-018	2	0	0	0	0	0	0	0	0	0	0	0	0
96	639281-014	2	1	0	1	0	1	0	0	0	0	0	0	0
96	640685-058	6	0	0	0	0	0	0	0	0	0	0	0	0
96	641562-010	2	0	0	0	0	0	0	0	0	0	0	0	0
96	649380-010	3	0	0	0	0	0	0	0	0	0	0	0	0
96	649687-010	1	0	0	0	0	0	0	0	0	0	0	0	0
96	650582-010	1	0	0	0	0	0	0	0	0	0	0	0	0
96	651682-010	2	0	0	0	0	0	0	0	0	0	0	0	0
96	659662-010	1	0	0	0	0	0	0	0	0	0	0	0	0
96	660280-010	4	3	0	2	1	0	0	1	4	0	3	0	0
96	681685-154	3	0	0	0	0	0	0	0	0	0	0	0	0
96	682685-010	2	2	2	0	0	1	0	1	0	0	0	1	1
96	683682-038	0	0	0	0	0	0	0	0	1	0	0	1	0
96	690682-082	6	2	2	0	0	0	0	1	0	0	1	0	0
96	691382-010	1	1	0	0	0	0	0	0	1	0	0	1	1
96	699682-022	1	0	0	0	0	0	0	0	0	0	0	0	0
96	709684-014	1	0	0	0	0	0	0	0	0	0	0	0	0
96	710381-038	1	0	0	0	0	0	0	0	0	0	0	0	0
96	712381-018	1	0	0	0	0	0	0	0	0	0	0	0	0
96	715381-018	1	1	1	0	0	0	0	0	0	0	0	0	0
96	716682-010	1	0	0	0	0	0	0	0	0	0	0	0	0
96	720281-018	0	0	0	0	0	0	0	0	3	0	1	2	1
96	721684-022	3	1	1	0	0	0	0	1	0	0	0	0	0
96	724684-026	2	1	0	0	0	0	0	0	1	1	1	0	0
96	726130-010	2	1	0	0	0	0	0	0	0	0	0	0	0

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Table 11

TABLE 96 03/31/81 MASSACHUSETTS SMSA 2600 TABLE 96

APPLICANTS AND NONAGRICULTURAL JOB OPENINGS BY OCCUPATION

ITEM NO	OCCUPATIONAL CODE	TOTAL REGISTERED APPS ACTIVE ANYTIME THIS FY	ACTIVE FILE: TOTAL	FEMALE	VETERAN	AGE GROUPS: UNDER 22	45 AND OLDER	MINORITY	ECONOMICALLY DISADVANTAGED	NONAGRICULTURAL OPENINGS: TOTAL RECEIVED	OPENING REC'D FEDERAL CONTRACTOR JOB LISTING	OPENING FILLED	UNFILLED OPEN: TOTAL	30 DAYS OR MORE
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
96	726261-010	3	0	0	0	0	0	0	0	0	0	0	0	0
96	726381-010	4	3	1	2	0	1	0	1	0	0	0	0	0
96	726384-010	1	1	1	0	0	0	1	1	0	0	0	0	0
96	726684-010	2	1	0	0	1	0	0	0	0	0	0	0	0
96	726684-018	47	15	12	1	3	0	2	5	0	0	0	0	0
96	726684-022	8	3	1	1	0	1	0	1	3	0	0	0	0
96	727687-022	1	0	0	0	0	0	0	0	0	0	0	0	0
96	729687-010	3	2	2	0	0	0	0	2	0	0	0	0	0
96	739687-026	1	0	0	0	0	0	0	0	0	0	0	0	0
96	739687-030	78	30	30	0	4	9	1	17	24	0	16	7	7
96	741684-026	5	1	0	0	0	1	1	1	3	0	3	2	2
96	741687-018	2	0	0	0	0	0	0	0	0	0	0	0	0
96	754684-030	3	1	1	0	0	1	0	1	7	7	5	2	0
96	763684-014	1	0	0	0	0	0	0	0	0	0	0	0	0
96	780682-018	1	1	1	0	0	1	0	0	0	0	0	0	0
96	781687-010	1	0	0	0	0	0	0	0	0	0	0	0	0
96	782684-058	2	2	2	0	0	1	0	1	0	0	0	0	0
96	783682-014	2	1	1	0	0	1	0	0	2	0	1	4	4
96	785261-010	3	1	1	0	0	0	0	0	0	0	0	0	0
96	787682-046	36	10	9	0	0	1	1	7	0	0	0	2	2
96	788687-030	3	2	2	0	0	0	0	2	1	0	1	0	0
96	795687-014	3	1	1	0	0	0	1	1	0	0	0	0	0
96	804281-010	1	0	0	0	0	0	0	0	2	0	0	2	2
96	806684-010	1	0	0	0	0	0	0	0	0	0	0	0	0
96	807381-010	15	2	0	2	0	0	1	1	5	0	2	2	2
96	809281-010	1	0	0	0	0	0	0	0	0	0	0	0	0
96	809684-010	1	0	0	0	0	0	0	0	0	0	0	0	0
96	811684-014	1	0	0	0	0	0	0	0	0	0	0	0	0
96	819384-010	8	3	0	2	0	1	0	0	1	1	1	0	0
96	819684-010	1	0	0	0	0	0	0	0	0	0	0	0	0
96	821361-026	1	1	0	1	0	0	0	0	0	0	0	0	0
96	824261-010	6	3	0	1	0	0	1	1	4	0	3	2	2
96	826361-010	1	0	0	0	0	0	0	0	0	0	0	0	0
96	828281-010	13	7	1	6	0	0	0	1	1	1	1	0	0
96	828381-014	1	1	1	0	0	0	0	1	0	0	0	0	0
96	840381-010	26	12	0	4	2	2	0	3	0	0	1	0	0
96	842664-010	1	0	0	0	0	0	0	0	0	0	0	0	0
96	844364-010	2	1	0	0	0	0	0	0	0	0	0	0	0
96	850683-010	2	0	0	0	0	0	0	0	0	0	0	0	0
96	859683-010	25	8	0	6	1	1	0	0	0	0	0	0	0
96	860281-010	2	0	0	0	0	0	0	0	2	0	1	0	0
96	860381-022	43	17	0	7	2	2	1	3	1	0	1	0	0

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Table 11

TABLE 96 03/31/81 MASSACHUSETTS SMSA 2600 TABLE 96

APPLICANTS AND NONAGRICULTURAL JOB OPENINGS BY OCCUPATION

ITEM NO	OCCUPATIONAL CODE	TOTAL REGISTERED APPS ACTIVE ANYTIME THIS FY	ACTIVE FILE							NONAGRICULTURAL OPENINGS				
			TOTAL	FEMALE	VETERAN	AGE GROUPS		MINORITY	ECONOMICALLY DISADVANTAGED	TOTAL RECEIVED	OPENING REC'D FEDERAL CONTRACTOR JOB LISTING	OPENING FILLED	UNFILLED OPEN	
						UNDER 22	45 AND OLDER						TOTAL	30 DAYS OR MORE
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
96	861381-018	4	1	0	1	0	0	0	1	0	0	0	0	0
96	862381-010	1	1	0	1	0	0	0	0	0	0	0	0	0
96	862381-018	4	0	0	0	0	0	0	0	0	0	0	0	0
96	862381-030	7	1	0	1	0	0	0	0	0	0	0	0	0
96	862381-034	1	1	0	1	0	0	0	0	1	1	1	0	0
96	862684-014	1	0	0	0	0	0	0	0	0	0	0	0	0
96	863381-014	1	0	0	0	0	0	0	0	0	0	0	0	0
96	864381-010	2	1	0	0	0	0	0	0	0	0	0	0	0
95	864481-010	1	0	0	0	0	0	0	0	0	0	0	0	0
96	865381-010	0	0	0	0	0	0	0	0	1	0	1	0	0
96	866381-010	22	8	0	1	1	1	0	1	11	0	5	3	3
96	869664-014	97	32	2	17	2	2	1	7	1	1	1	0	0
96	899281-014	8	6	0	4	0	2	1	1	1	0	1	0	0
96	899381-010	30	9	0	5	1	3	0	1	4	0	2	1	0
96	899684-022	2	0	0	0	0	0	0	0	0	0	0	0	0
96	903683-018	5	2	0	2	1	1	0	0	0	0	0	0	0
96	904383-010	70	39	2	23	0	5	0	5	4	0	6	0	0
96	905663-014	82	44	1	25	3	7	0	13	5	0	3	1	1
96	906683-022	26	11	1	2	5	1	0	1	7	0	6	3	1
96	913463-010	12	8	6	0	0	1	0	6	0	0	0	0	0
96	913463-018	5	3	2	0	1	0	0	0	0	0	0	0	0
96	915467-010	12	3	1	0	2	0	0	1	1	0	0	0	0
96	919683-014	4	3	1	1	0	0	0	3	1	0	1	0	0
96	919687-014	5	3	0	1	0	1	0	0	1	0	1	0	0
96	920587-018	263	124	111	0	27	25	9	60	46	30	24	10	3
96	920685-078	16	8	5	0	0	1	1	2	0	0	0	0	0
96	920667-014	7	4	1	0	2	1	0	2	0	0	0	0	0
96	920687-126	1	0	0	0	0	0	0	0	0	0	0	0	0
96	920687-134	5	2	2	0	1	0	1	2	0	0	0	0	0
96	929686-010	3	3	2	0	0	2	1	2	2	0	1	1	1
96	929687-022	3	1	0	0	0	1	0	0	5	5	5	0	0
96	929687-030	402	194	58	25	64	22	31	75	60	20	48	8	4
96	950382-026	1	0	0	0	0	0	0	0	1	1	0	1	0
96	954382-014	1	0	0	0	0	0	0	0	0	0	0	0	0
96	971381-050	1	0	0	0	0	0	0	0	0	0	0	0	0
96	972381-010	1	0	0	0	0	0	0	0	0	0	0	0	0
96	973381-010	1	1	0	1	0	1	0	0	0	0	0	0	0
96	979382-022	0	0	0	0	0	0	0	0	1	0	1	0	0
96	TOTAL OF INVALID OCCUPATIONAL CODES	26	18	8	5	6	1	2	7	0	0	0	0	